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***Travel and Transportation Management
Resource Management Plan Amendment for the WRFO***

***Draft RMPA - Appendices
Public Review***

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Appendix A. Travel Management Direction in the 1997 RMP (No Action Alternative)

A.1. Goals

Provide access for oil and gas development consistent with public health and safety and other resource value concerns. (O/G RMPA page 2-37)

A.2. Objectives

Manage motorized vehicle travel on public lands to provide for public need and demand, protect natural resources, provide for the safety of public land users, and to minimize conflicts among various users of public lands. (RMP page 2-44)

Enhance access to public lands and resources. (RMP page 2-53)

Provide needed and appropriate ingress, egress, and access routes to and across public lands for oil and gas activities. (O/G RMPA page 2-37)

Reclaim or mitigate erosion impacts on transportation corridors. (O/G RMPA page 2-37)

Manage travel and transportation to 1) reduce mortality from vehicle collisions, 2) limit change in GRSG behavior, 3) avoid, minimize, and compensate for habitat fragmentation, 4) limit the spread of noxious weeds, and 5) limit disruptive activity associated with human access. (GRSG RMPA page 2-23)

A.3. Allowable Uses (Allocations)

No areas will be designated as open to OHV use at this time. (RMP page 2-44)

Winter snowmobile use will remain open, except within the Moosehead road closure area, Oak Ridge State Wildlife Area, and the six Wilderness Study Areas. (RMP page 2-44)

Until a Travel Management Plan is completed, motorized vehicles will be limited to existing roads, ways and trails on most of the public lands in the Resource Area from October 1 through April 30 each year (See Map 2-22). (RMP page 2-44)

Motorized vehicle travel will be limited to existing roads, ways and trails all year in identified fragile soil areas, the black-footed ferret reintroduction areas, the Texas-Missouri-Evacuation Creek cultural resource area, and in areas with potential habitat for Threatened and Endangered or sensitive plant species. These overlapping areas cover approximately 326,985 acres. (RMP page 2-44)

Motorized vehicle use in ferret recovery areas will be limited to existing roads and trails prior to development of a travel management plan. (RMP page 2-35)

Motorized vehicle travel within known locations of sensitive plants and high priority RVAs that are located outside the areas designated as ACECs, will be limited to existing roads and trails. (RMP page 2-18)

Motorized vehicle use will be limited to designated roads and trails in: ACECs, in order to protect sensitive resources (See Maps 2-23A through 2-23F); the Indian Valley/Deep Channel area, to comply with a court ruling (See Map 2-24); the Canyon Pintado National Historic District, in order to protect fragile cultural resources (See Map 2-25); and the Wilson Creek area (See Map 2-23G). (RMP page 2-44 and 2004 Wilson Creek Transportation Plan Amendment).

Motorized vehicle travel within ACECs for T/E plants will be limited to designated roads and trails (See Maps 2-23A through 2-23F). Roads or trails in these areas not designated for use will be abandoned and reclaimed. Off road motorized vehicle travel will be prohibited in these areas. (RMP page 2-17)

Motorized vehicle travel within designated ACECs will be allowed only on designated roads and trails. (RMP page 2-18)

Roads not designated for use within ACECs will be abandoned and reclaimed. (RMP page 2-19)

Motorized vehicle travel within ACECs for T/E plants will be limited to designated roads and trails. Roads or trails in these areas not designated for use will be abandoned and reclaimed. Off road motorized vehicle travel will be prohibited in these areas. (O/G RMPA page 2-39)

Protect cultural resource values in the Texas-Missouri-Evacuation Creek area by: 1) Limit OHV use to existing roads and trails (RMP page 2-47)

All six Wilderness Study Areas (WSAs) are designated as closed until such time that congress either designates them as wilderness or releases them for multiple uses. (RMP page 2-44)

WSAs designated as wilderness will remain closed to motorized vehicle use to prevent damage to resources and wilderness values within these areas and to comply with the Wilderness Act. (RMP page 2-45)

Except for permitted uses, WSAs will be closed to motorize vehicle travel. (RMP page 2-38)

Except for permitted uses, WSAs would be closed to motorized/mechanized use. If WSAs are released by Congress for management for multiple uses, motorized vehicle travel would be limited to designated roads and trails. (O/G RMPA page 2-38)

Wilderness Study Areas would remain closed to motorized and mechanized vehicle use until Congress either designates them as wilderness or releases them for multiple uses. (O/G RMPA page 2-38)

Motorized vehicle travel, in areas released to multiple use by Congress, will be limited to designated roads and trails. (RMP page 2-38)

Vehicle use in WSAs released from wilderness consideration by Congress would be limited to designated roads and trails. (RMP page 2-45)

Public Lands in the Moosehead Mountain Road Closure Area (6,909 acres) and Oak Ridge State Wildlife Area (2,918 acres) will be designated as closed to motorized vehicle use to prevent damage to watershed resources and wildlife habitat. (RMP page 2-45)

The Moosehead Road Closure Area and BLM lands within the Oak Ridge State Wildlife Area will continue to be closed to general motorized vehicle travel. (RMP page 2-29)

The Cow Creek and Timber Gulch/Hay Gulch areas (7,390 acres) will be closed to motorized vehicle use from August 15 through November 30 each year in order to establish non-motorized quality hunting areas. (RMP page 2-44)

To develop a non-motorized quality hunting area, no motorized vehicles will be allowed in Cow Creek, Timber Gulch and Hay Gulch areas from August 15 to November 30. Vehicle use may be permitted during this time for permitted purposes. (RMP page 2-44)

Public lands, in the vicinity of East Douglas Creek, near the Rio Blanco/Garfield County line (known locally as Pike Ridge), are closed to all forms of vehicular travel, except for specifically permitted uses. Public land segments of the trail leaving that road sometimes referred to as Rio Blanco County Road 14, at a point lying approximately 4,600 feet east of said road's intersection with Rio Blanco County Road 8, and crossing public lands is closed to all forms of vehicular travel, except snowmobiles (see Federal Register Volume 59, Number 247 for legal descriptions).

Within a sage-grouse Priority Habitat Management Area (PHMA), limit off-highway vehicle (OHV) travel to existing roads, primitive roads, and trails at a minimum. (GRSG RMPA page 2-23)

Within sage-grouse PHMA, evaluate and consider permanent or seasonal road or area closures as needed to address a current threat. (GRSG RMPA page 2-23)

Motorized vehicle travel for oil and gas activities (including pre-construction survey work) would be limited year-round to authorized routes or to existing routes that are limited seasonally in the 1997 RMP, identifiable from the 2011 National Agriculture Imagery Program (NAIP) digital data sets (921,000 acres). Routes newly constructed for oil and gas activities would be closed except to uses defined by the Authorized Officer. Those uses would generally be limited to compliance, maintenance, drilling, and production activities. (O/G RMPA page 2-37)

Well access routes would generally be unavailable for public vehicular access, including BLM permittees, not expressly associated with oil and gas development, production, monitoring, and maintenance. Exceptions would be evaluated on a case-by-case basis in the context of disturbance thresholds established for each seasonal range and leaseholding. Access routes

developed for well and facility access would also generally be subject to complete abandonment once its intended use is complete. (O/G RMPA page 2-37)

In areas of concentrated oil and gas development (for example, the geography encompassing acute/collective activity), vehicle use on BLM vehicle access networks (including existing roads, trails, and ways), where logistically practicable, would be temporarily limited to that associated directly with oil and gas development, production, and maintenance. Use by other BLM authorized land users could be considered, as determined by the Authorized Officer, consistent with big game management objectives. To be effective, this mitigation should control the use of vehicle access networks in areas of concentrated development rather than relying on controls applied to individual well access routes. (O/G RMPA page 2-37)

A.4. Exceptions (Allowable Uses/Allocations)

The limitation restricting OHV use to existing roads and trails from October 1 through April 30 is necessary to prevent damage to soil, water, vegetation, wildlife, and other sensitive resources during periods when the ground is generally wet from rain or snow. This limitation is also necessary to limit the creation of new roads and trails in areas that will not sustain them. Vehicle use will not be restricted in these areas outside of this time period (May 1 through September 30). Approximately 922,200 acres are included within this designation. Exceptions to this limitation during the limited period (October 1 through April 30) are as follows:

- Vehicles may be allowed to travel up to 300 feet from an existing road, way or trail to park, camp, gather firewood, etc. as long as no damage is caused to resources;
- Hunters may use motorized vehicles to retrieve downed big game as long as damage to resources does not occur;
- Physically challenged individuals (Having DOW permit) may be allowed to continue travel off existing roads and trails during the limited months; and
- Emergencies involving threats to life and property. (RMP page 2-45)

A.5. Future Implementation Planning (Management Action)

The above road designations will remain in effect until a site specific Travel Management Plan can be completed. (RMP page 2-45)

A Travel Management Plan will be completed using a public process that will help determine the following:

- If and where roads and trails will be closed;
- Identify public needs such as construction of motorized or non-motorized trails; and
- Determine the need for open areas;
- Criteria will be integrated or developed in the plan, to help achieve established resource objectives, such as, stabilizing or reducing disruption of big game habitat use (that is, effective road density limitations) and preventing damage to riparian and aquatic habitats. (RMP page 2-45)

Complete activity level travel plans as soon as possible in sage-grouse PHMA, subject to funding. During activity level planning, where appropriate, designate routes with current administrative/agency purpose or need to administrative access only. (GRSG RMPA page 2-23)

Complete activity level travel plans as soon as possible in sage-grouse PHMA, subject to funding. Limit route construction to routes that will not adversely affect GRSG populations due to habitat loss or disruptive activities. (GRSG RMPA page 2-23)

All known roads and trails in the White River Resource Area will be entered into a GIS computer data base. The data base will then be used to help develop the travel management plan. (RMP page 2-45)

All roads and trails will be numbered during preparation of the Travel Management Plan. Numbering will be consistent with BLM policy and the transportation system. The numbered roads and trails and the computer data base will be updated and maintained on a regular basis. (RMP page 2-46)

Roads and trails within designated areas (WSAs, ACECs and other limited or closed areas) will have maps prepared for public distribution and will be marked on the ground with signing. (RMP page 2-45)

As proposals for construction of new roads or trails are received, NEPA documentation will analyze impacts and determine appropriate designations and the potential for replacement of other existing roads. Criteria will be developed as part of the travel management planning process to aid in the determination for changing a particular area's road and trail designations, or adding/ closing roads and trails. Any road closures will be announced in the Federal Register but will not require an RMP amendment. (RMP page 2-46)

A.6. Additional Criteria to Consider During Implementation Planning (Management Action)

Existing roads and public utility Rights-of-Way (pipelines, power lines, and communication facilities) within known T/E habitat may be relocated if a determination is made that the relocation action will benefit and promote recovery and will not further impact a T/E plant species. (RMP page 2-18)

The following constraints will be applied to all fires on public lands: Stream crossing locations will be limited to existing roads and trails. (RMP page 2-55)

New road construction or improving/maintaining primitive roads would not be allowed within Tier 1 areas, and would be allowed in Tier 2 and Tier 3 areas. Appropriate COAs (as described below) may be applied. (O/G RMPA page 2-43)

Road abandonments and seasonal closures during periods of animal occupation will be used, to the extent practical, to limit effective road densities to an average maximum 1.5 miles/square

mile on big game critical habitats and three miles/ square mile on remaining big game ranges. Restrictions could be temporarily excepted to achieve special management needs (e.g. increase harvest). These road density objectives will be developed through site specific travel management or integrated activity plans. Special conditions of approval will be applied through the environmental analysis process to preclude or discourage continued vehicular traffic on linear rights-of-way within closed areas. (RMP page 2-29)

Road abandonment and use limitations would be used to limit effective road densities in the long term to an average maximum 1.5 miles per square mile in higher value big game habitat (that is, defined severe winter range and summer range) and 3 miles per square mile on other big game ranges. (O/G RMPA page 2-38)

Development of a travel management or integrated activity plan will implement effective road and trail density goals of 1.5 miles per square mile within the ferret recovery areas. (RMP page 2-35)

Use of newly developed well access routes in black-footed ferret habitat would be limited to activities associated directly with oil and gas development, production, and maintenance. Access routes would be reduced to minimum standards during production and eliminated upon project completion. (O/G RMPA page 2-38)

Motorized vehicle use associated with oil and gas development within the Wolf Creek black-footed ferret management area (including Coyote Basin and Snake John Reef units) would be restricted to authorized roads and trails area. Effective route and trail densities of no more than 1.5 miles per square mile would remain open for public vehicular travel in these areas. (O/G RMPA page 2-38)

Development of a travel management plan or integrated activity plan will include the establishment of an effective road density limit of 1.5 miles per square mile within the East Douglas ACEC. (RMP page 2-36)

Road density objectives, where appropriate to fishery and wildlife issues, will be implemented through a Travel Management Plan or integrated activity plans developed subsequent to this RMP. (RMP page 2-37)

Use of newly developed well access routes in lynx habitat would be limited to that associated directly with oil and gas development, production, and maintenance activity. Access routes would be reduced to minimum standards during production and eliminated upon project completion. (O/G RMPA page 2-38)

The BLM would request that maximum efforts be applied to reduce the extent and effective utility of snow compaction or removal activities in lynx habitat as travel corridors for competitive carnivores. Use of over-the-snow vehicles would be prohibited for use in lynx habitat during project-related reconnaissance, on-site inspections, or surveys. (O/G RMPA page 2-38)

Within sage-grouse PHMA, use existing roads or realignments whenever possible. If it is necessary to build a new road, and the use of existing roads would cause adverse impacts to GRSG, construct new roads to the appropriate minimum Gold Book standard and add the surface disturbance to the total disturbance in the priority habitat management area if it meets the criteria in Appendix H of the Sage-Grouse ROD (Guidelines for Implementation and Adaptive Management). (GRSG RMPA page 2-23)

Construct no new roads if the biologically significant unit (Colorado populations) and proposed project analysis area (Colorado Management Zone) is over the 3% disturbance cap (see Appendix E of the Sage-Grouse ROD), unless there is an immediate health and safety need, or to support valid existing rights that cannot be avoided. Evaluate and implement additional, effective mitigation necessary to offset the resulting loss of sage-grouse habitat. (GRSG RMPA page 2-24)

Within sage-grouse PHMA, allow upgrades to existing routes after documenting that the upgrade will not adversely affect GRSG populations due to habitat loss or disruptive activities. (GRSG RMPA page 2-24)

Within PHMA, limit route construction to routes that will not adversely affect GRSG populations due to habitat loss or disruptive activity. (GRSG RMPA page 2-24)

Within sage-grouse PHMA, conduct restoration of roads, primitive roads and trails not designated in travel management plans. This also includes primitive route/roads that were not designated in WSAs and within lands with wilderness characteristics that have been selected for protection in previous land use plans. (GRSG RMPA page 2-24)

Within sage-grouse PHMA, when reseeding roads, primitive roads and trails, use appropriate seed mixes and consider the use of transplanted sagebrush. (GRSG RMPA page 2-24)

Livestock trailing use will be authorized to and from BLM grazing allotments along established trails on 9,600 acres of BLM land. Established trails include the White River Trail, Victory Trail, Dragon Trail, Yellow Jacket Trail, Ute Trail, and Staley Mine Trail, all collectively known as the White River Trail Allotment 6699. Crossing permits will be authorized on public land outside established trails on a case-by-case basis, based upon the applicant's need. (RMP page 2-23)

Public and/or administrative access across private land will be identified for acquisition for areas having high public resource values with limited or no public or administrative access. (RMP page 2-53)

Administrative and public access will be obtained through acquisition of easements, acquisition of land through exchanges, road construction or renovation, or by other appropriate means. (RMP page 2-53)

Lands identified for public access enhancement include:

- 1) Large blocks of inaccessible BLM lands or lands with currently limited/restricted public access,

- 2) Smaller blocks of high demand or high interest BLM lands, and
- 3) Lands that will tie major open routes together. Map 2-27 shows some of the broad areas where: a) public access needs to be enhanced; b) administrative access is needed; or c) both public and administrative access is needed.

The type and degree of access acquired will be consistent with the management direction for, or emphasis of, the area to be accessed. These areas are not all inclusive however, and access activities may take place throughout the Resource Area, on a case by case basis, as opportunities arise. (RMP page 2-53)

Priorities for acquiring access will be identified for all areas needing access, generally through the transportation planning and integrated activity plan process. Plans will identify specific tracts of land or roads needed for public or administrative access. All access plans will include necessary NEPA documentation. (RMP page 2-54)

The BLM will strive to secure public access to landlocked BLM Land fisheries that exceed 1/2 mile in length and are >1.5 miles from vehicular access. (RMP page 2-33)

Acquire access in the Blue Mountain Geographic Reference Area (GRA) (North). (RMP page 2-41)

Acquire WSA access in the Blue Mountain GRA (South). (RMP page 2-41)

Designate/develop mountain bike routes connecting to Yampa Valley Trail in DNM, Harper's Corner Road to Town of Dinosaur, and Moosehead Mountain to Skull Creek Rim. (RMP page 2-41)

Provide river access and establish launch sites/parking and interpretive facilities in the White River ACEC (Meeker to Kenny Reservoir). (RMP page 2-42)

Provide river access; establish launch sites/parking and interpretive facilities; develop watchable wildlife sites and trails at Kenny Reservoir in partnership with others; and develop boat launch/parking above Shavetail Bridge in the White River ACEC (Kenny Reservoir to Shavetail Bridge). (RMP page 2-42)

Securing public access to public lands will be a priority where demand, recreational values, and sufficient size warrants legal and/or physical access. This access would be acquired through easement, agreement, exchange or other means. (RMP page 2-43)

Develop motorized and non-motorized trails (e.g. mountain bike, hiking, horseback, ATV, 4-wheel drive, snowmobile, etc.) as demand/needs dictate in the White River ACEC (Shavetail Bridge to Utah Border). Trails may include but are not limited to: Rangely Loop, Dinosaur, Ute, Dominguez-Escalante, Scenery Gulch, Cathedral Bluffs, and China Wall/Lion canyon/Lobo Mountain Trails. Develop links to other trails: Yampa Valley Trail, Kokopelli's Trail, Uinta Railroad into Utah, etc. (RMP page 2-44)

Public access rights will be reserved on all disposal tracts that control access to BLM lands. (RMP page 2-53)

Access routes constructed for oil and gas activities that are considered redundant or unneeded would be obliterated and reclaimed. (O/G RMPA page 2-38)

In coordination with counties and authorized users, temporary route closures would be applied in areas with concentrated oil and gas development as needed to meet public health and safety or other resource concerns. (O/G RMPA page 2-38)

Appendix B. Alternatives (Detailed Information)

B.1. BLM Policy Common to All Alternatives

Federal regulations and BLM policy provide management that is common to all alternatives, including:

- designating WSAs as closed to motorized use;
- provisions for temporary closures to address adverse impacts to resources;
- provisions for emergency closures;
- standard exceptions to motorized vehicle use restrictions;
- requiring supplementary rules to restrict non-motorized access; and
- acknowledgement that evaluation of RS2477 assertions are outside of the scope of BLM's land use planning process.

B.1.1. *Management of Motorized Travel in WSAs*

Primitive routes (or ways) are those routes maintained solely by the passage of vehicles, or which has not been improved and/or maintained by mechanical means to ensure relatively regular and continuous use. The BLM has identified primitive routes as existing prior to the designation in all six WSAs in the WRFO. The BLM manages the WSAs as closed to motorized travel per the 1997 RMP, however there are exceptions for administrative access such as to maintain range improvements and to access pre-FLPMA valid and existing rights.

It is the BLM's policy not to establish new discretionary uses in WSAs that would impair the suitability of such areas for wilderness designation. Since motorized travel by the general public on these primitive routes have not been permitted for at least 20 years, considering public or recreational motorized or mechanized travel in the WSAs would be a new discretionary use that would impair the suitability of these areas for wilderness designation.

B.1.2. *Temporary Closures*

Where off-route vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence. (Travel and Transportation Handbook H-8342-1, page 38, based on 43 CFR 8341.2)

B.1.3. *Emergency Closures*

In the event of an emergency, immediate actions, such as closure or restrictions or uses of the public lands, must be taken to prevent or reduce risk to public health or safety, property or important resources. Emergencies are unforeseen events of such severity that they require immediate action to avoid dire consequences. The BLM NEPA Handbook (H-1790-1, Section 2.3) defines the following actions as typical emergency actions:

- Cleanup of a hazardous material spill;
- Fire suppression activities related to ongoing wildland fires; and

- Emergency stabilization actions following wildland fires or other disasters. (Travel and Transportation Handbook H-8342-1, page 37)

B.1.4. Standard OHV Exceptions

The following exceptions apply to restrictions on motorized travel in limited and closed areas:

- Any non-amphibious registered motorboat;
- Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes;
- Any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved;
- Vehicles in official use; and
- Any combat or combat support vehicle when used in times of national defense emergencies. (43 CFR 8340.0-5)

B.1.5. Supplementary Rules

If the WRFO chooses to restrict non-motorized travel to specific routes, it must do so through the development of supplementary rules through a Federal Register process (43 CFR 8365.1-6).

Supplementary rules would need to be established for any areas identified in the RMPA where non-motorized access is limited to designated routes or some other limitations on use.

B.1.6. RS 2477 Assertions

A travel management plan is not intended to provide evidence bearing on or addressing the validity of any R.S. 2477 assertions. R.S. 2477 rights are determined through a process that is entirely independent of the BLM's planning process. Consequently, travel management planning should not take into consideration R.S. 2477 assertions or evidence. Travel management planning should be founded on an independently determined purpose and need that is based on resource uses and associated access to public lands and waters. At such time as a decision is made on R.S. 2477 assertions, the BLM will adjust its travel routes accordingly. (Travel and Transportation Handbook H-8342-1, page 30)

B.2. Comparison of Alternatives

B.2.1. Goals, Objectives, and Allowable Uses

Table 1 provides a comparison of the goals, objectives, and allowable uses for each alternative. Goals and objectives described desired outcomes. Allowable uses (land use allocations) describe areas where uses are allowed, restricted, or prohibited in order to meet goals and objectives; in travel management planning those categories of allowable uses are referred to as open, limited, or closed areas, respectively. A summary of current management (Alternative A – No Action Alternative) is provided in the table whereas the specific management decisions are listed in Appendix A. Maps for components of the various alternatives are provided in Appendix C.

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
Goals				
1	Provide access for oil and gas development consistent with public health and safety and other resource value concerns.	Manage travel on public lands to protect natural resource values, provide for the safety of public land users, and to minimize conflicts among various users of public lands, while providing for appropriate public and administrative access.		
2	No similar goal.	Establish working partnerships with other Federal agencies, State and local governments, and Indian tribes; user groups; commercial providers; and other interested parties that will facilitate effective management of the transportation network, including the planning for and implementation of successful trail systems and use areas.		
Objectives				
3a	Manage motorized vehicle travel on public lands to provide for public need and demand, protect natural resources, provide for the safety of public land users, and to minimize conflicts among various users of public lands.	<div>Manage the transportation network to:</div> <ul style="list-style-type: none">• enhance access to public lands, where needed;• provide for a diversity of recreation opportunities and settings;• provide for mineral exploration, development, and reclamation consistent with lease rights;• minimize degradation of soil and vegetation stability and productivity;• prevent impairment of air and water quality consistent with State and Federal standards;• prevent impairment of wilderness characteristics in Wilderness Study Areas;• maintain and enhance the reproductive viability, abundance, and distribution of special status plant species;• meet State and Federal habitat and population objectives for targeted wildlife species;		
3b	Enhance access to public lands and resources.			

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
3c	Provide needed and appropriate ingress, egress, and access routes to and across public lands for oil and gas activities.	<ul style="list-style-type: none">• reduce sage-grouse mortality from vehicle collisions; limit adverse change in sage-grouse behavior; avoid, minimize, and compensate for direct and indirect habitat loss and fragmentation; limit the spread of noxious weeds; and limit disruptive activity associated with human access within all designated habitat (ADH) for greater sage-grouse;• preserve and protect paleontological, cultural, and historic resources in accordance with existing laws and regulations; and• provide for Native American’s needs for collection and/or use of traditional resources and religious practices.		
3d	Reclaim or mitigate erosion impacts on transportation corridors.			
3e	Manage travel and transportation to 1) reduce mortality from vehicle collisions, 2) limit change in GRSG behavior, 3) avoid, minimize, and compensate for habitat fragmentation, 4) limit the spread of noxious weeds, and 5) limit disruptive activity associated with human access.			
Allowable Uses				
4	Overall summary for OHV area designations (motorized travel): <ul style="list-style-type: none">• Closed: 100,200 acres¹;• Closed from 8/15 to 11/30: 1,200 acres;• Closed from 8/15 to 11/30, Limited to existing routes 12/1-8/14: 20,600 acres;	Overall summary for OHV area designations (motorized travel): <ul style="list-style-type: none">• Open to motorized travel: 118 acres;• Closed to motorized travel: 441,800 acres; and• Limited to designated routes: 1,058,500 acres.	Overall summary for OHV area designations (motorized travel): <ul style="list-style-type: none">• Open to motorized travel: 289 acres;• Closed to motorized travel: 89,500 acres;• Limited to primitive routes: 292,600 acres; and	Overall summary for OHV area designations (motorized travel): <ul style="list-style-type: none">• Open to motorized travel: 167 acres;• Closed to motorized travel: 197,900 acres;• Limited to either primitive or designated routes (58,900 acres).

¹ The estimated acreages in this table are provided for general comparisons between the alternatives. Due to rounding errors and topology errors (e.g., slivers) in the GIS data, the acreages do not sum the same across alternatives (an estimated +/- 3 percent error rate).

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
	<ul style="list-style-type: none"> Limited to designated routes: 55,100 acres; Limited to existing routes: 822,900 acres; Limited to existing routes from 10/1 to 4/30: 452,000 acres. 		<ul style="list-style-type: none"> Limited to designated routes: 1,069,400 acres. In the areas limited to either primitive or designated routes, 46,800 acres have seasonal limitations 	<ul style="list-style-type: none"> Limited to designated routes: 1,226,100; and In the areas limited to either primitive or designated routes, 20,300 acres have seasonal limitations
5	No areas are designated as open to motorized travel. (RMP page 2-44)	<p>Designate the following areas as open to motorized travel:</p> <ul style="list-style-type: none"> Rock slabs within the Rangely Rock Crawling Park (52 acres); North Rangely Open Area (11 acres); North Dinosaur Open Area (50 acres); and LO7 Hill Open Area (5 acres). 	<p>Designate the following areas as open to motorized travel:</p> <ul style="list-style-type: none"> Rock slabs within the Rangely Rock Crawling Park (52 acres); North Rangely Open Area (37 acres); North Dinosaur Open Area (150 acres); and LO7 Hill Open Area (50 acres). 	<p>Designate the following areas as open to motorized travel:</p> <ul style="list-style-type: none"> Rock slabs within the Rangely Rock Crawling Park (50 acres); North Rangely Open Area (10 acres); North Dinosaur Open Area (91 acres); and LO7 Hill Open Area (16 acres).
6	<p>Designate the following areas as closed to motorized travel:</p> <ul style="list-style-type: none"> WSAs (79,900 acres); Moosehead Mountain (7,704 acres); Oak Ridge SWA (3,094 acres); Pike Ridge (9,239 acres); and the Trail leaving Rio Blanco County (RBC) Rd 14 	<p>Designate as closed areas for motorized travel:</p> <ul style="list-style-type: none"> WSAs (79,900 acres); Moosehead Mountain ACEC with modified boundary to allow for camping on west side and next to Harper's Corner Road, (7,518 acres, including overlap with lands with 	<p>Designate as closed areas for motorized travel:</p> <ul style="list-style-type: none"> WSAs (79,900 acres); Moosehead Mountain ACEC with modified boundary to allow for camping on west side, next to Harper's Corner Road, and at Turner Creek pond (7,488 acres); 	<p>Designate as closed areas for motorized travel:</p> <ul style="list-style-type: none"> WSAs (79,900 acres); Moosehead Mountain ACEC with modified boundary to allow for camping on west side (by the existing gate), next to Harper's Corner Road, and on the north side (7,538 acres, including overlap with

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
	near intersection with RBC Rd 8.	<p>wilderness characteristics);</p> <ul style="list-style-type: none"> • BLM land associated with the Oak Ridge SWA (3,094 acres); • Pike Ridge (9,239 acres, including overlap with lands with wilderness characteristics); • All lands with wilderness characteristics areas (298,850 acres); • Indian Valley parcel (11,052 acres, including overlap with lands with wilderness characteristics); • Anderson Gulch (1,914 acres); • Big Ridge proposed Backcountry Conservation Area (including overlap with lands with wilderness characteristics) (28,026 acres); • Select riverine parcels within the White River ACEC, including: <ul style="list-style-type: none"> ◦ Beefsteak (38 acres of 100-year floodplain and 	<ul style="list-style-type: none"> • Select riverine parcels within the White River ACEC, including: <ul style="list-style-type: none"> ◦ Beefsteak (38 acres); and ◦ Hardaway (117 acres); and • Parcels adjacent to closed, roadless areas on the White River National Forest (Same as Alt B, 1,987 acres) 	<p>lands with wilderness characteristics);</p> <ul style="list-style-type: none"> • BLM land associated with the Oak Ridge SWA (3,094 acres); • Portions of Big Ridge, Whiskey Creek, Coal Ridge, Moosehead Mountain, North Colorow, Pike Ridge, Pinto Gulch, and Upper Coal Oil Rim lands with wilderness characteristics units (76,656 acres, including overlap with Indian Valley and Moosehead Mountain ACEC); • Indian Valley parcel (11,052 acres, including overlap with lands with wilderness characteristics); • Anderson Gulch (1,914 acres); • Select riverine parcels within the White River ACEC, including: <ul style="list-style-type: none"> ◦ Beefsteak (38 acres); ◦ Olive Garden (50 acres); and ◦ Hardaway (117 acres); and

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
		<p>terraces south of Highway 64: T1N R96W sec. 26: Lots 1, 3);</p> <ul style="list-style-type: none"> ○ Olive Garden (50 acres of 100-year floodplain: T2N R102W sec. 36: Lot 5); and ○ Hardaway (117 acres of 100-year floodplain and terraces between RBC Rd 102 and RBC Rd 2: T1N R103W sec. 11: S2NW, Lots 1, 2, 5, 6); and <ul style="list-style-type: none"> • Parcels adjacent to closed, roadless areas on the White River National Forest including: <ul style="list-style-type: none"> ○ 3 parcels on the west side of the South Fork drainage (WRNF roadless area 5B) (718 acres); ○ 2 parcels on Buford Ridge and south of Bailey Lake (WRNF roadless area 5A) (954 acres); 		<ul style="list-style-type: none"> • Parcels adjacent to closed, roadless areas on the White River National Forest including (Same as Alt B, 1,987 acres)

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
		<ul style="list-style-type: none"> ○ 1 parcel on Old Baldy near the intersection of RBC Rd 14 and RBC Rd 8 (WRNF roadless area 5A) (315 acres) 		
7	<p>Designate the following areas as limited to designated routes:</p> <ul style="list-style-type: none"> • ACECs (except East Douglas ACEC); • Indian Valley/Deep Channel area; • Canyon Pintado National Historic District; and the • Wilson Creek area. 	<p>All areas not designated as open or closed for motorized travel would be limited to designated routes.</p> <p>As interim management, the WRFO would follow the route designations in the RMP for the following areas (however the route designations could change as TMPs are completed):</p> <ul style="list-style-type: none"> • ACECs (except East Douglas ACEC); • Indian Valley/Deep Channel area; • Canyon Pintado National Historic District; and • the Wilson Creek area. 	<p>All areas not designated as open or closed for motorized travel would be limited to designated routes.</p> <p>Motorized travel within all lands with wilderness characteristics (except for the portion that overlaps with the Moosehead Mountain ACEC) would be limited to primitive routes.</p> <p>As interim management, the WRFO would follow the route designations in the RMP for the following areas (however the route designations could change as TMPs are completed):</p> <ul style="list-style-type: none"> • ACECs (except East Douglas ACEC); • Indian Valley/Deep Channel area; • Canyon Pintado National Historic District; and • the Wilson Creek area. 	<p>All areas not designated as open or closed for motorized travel would be limited to designated routes.</p> <p>All of the Raven Ridge, Bull Canyon North, Bull Canyon South, Willow Creek South, Coal Oil Gulch, MF Mountain, and Lower Wolf Creek lands with wilderness characteristics units and a portion of the Pike Ridge, Whiskey Creek, Big Ridge, Moosehead Mountain, Upper Coal Oil Rim, Pinto Gulch, North Colorow, and Coal Ridge lands with wilderness characteristics units would be limited to either primitive or designated routes (58,927 acres).</p> <p>As interim management, the WRFO would follow the route designations in the RMP for the following areas (however the route designations could change as TMPs are completed):</p>

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
				<ul style="list-style-type: none"> • ACECs (except East Douglas ACEC); • Indian Valley/Deep Channel area; • Canyon Pintado National Historic District; and • the Wilson Creek area.
8	<p>Designate the following areas as limited to existing routes (year-round):</p> <ul style="list-style-type: none"> • identified fragile soil areas; • black-footed ferret reintroduction areas; • the Texas-Missouri-Evacuation Creek cultural resource area; • in areas with potential habitat for special status plant species; • known locations of sensitive plants and high priority RVAs located outside of ACECs; and • sage-grouse priority habitat management areas. <p>Until a Travel Management Plan is completed, motorized vehicles will be limited to existing roads,</p>	<p>As interim management, motorized travel would be restricted to existing routes (as depicted on the 2014-2016 Travel Route Inventories). As TMPs are completed, motorized travel would be restricted to designated or primitive routes (in limited areas).</p>		

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
	ways and trails on most of the public lands in the Resource Area from October 1 through April 30 each year.			
9	<p>Routes within the following areas are closed to motorized travel from August 15 to November 30:</p> <ul style="list-style-type: none"> • Cow Creek (6,293 acres); and • Timber Gulch/Hay Gulch (15,496 acres). 	No similar action.	<p>The following big game winter habitat areas would be subject to seasonal limitations (closed to motorized and mechanized travel) from October 1 to April 30:</p> <ul style="list-style-type: none"> • Blacks Gulch (3,290 acres); • Crooked Wash (4,070 acres); • East Coal Oil (5,988 acres); • Scullion (7,965 acres); and • Spooky Mountain (4,330 acres). <p>The following sage-grouse breeding/nesting habitat areas would be subject to seasonal limitations (closed to motorized and mechanized travel) from March 1 to July 15:</p> <ul style="list-style-type: none"> • Box Elder (863 acres); • Elk Springs (7,213 acres); • K Point (527 acres); 	No similar action.

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
			<ul style="list-style-type: none"> Stuntz Ridge (351 acres); Stuntz Reservoir (3,724 acres); and Johnson Draw (8,517 acres). 	
10	<p>Winter snowmobile use will remain open, except within:</p> <ul style="list-style-type: none"> the Moosehead road closure area (7,704 acres), Oak Ridge State Wildlife Area (3,094 acres), and the six Wilderness Study Areas (79,900 acres). 	<p>The following areas would be closed to over-snow motorized travel:</p> <ul style="list-style-type: none"> areas closed to motorized travel (441,800 acres). <p>Over-snow motorized travel would be limited to designated routes in:</p> <ul style="list-style-type: none"> big game severe winter ranges (276,812 acres); big game winter concentration areas (82,249 acres); greater sage-grouse PHMA (101,520 acres, including some overlap with big game ranges); and Canada lynx habitat (2,332 acres). <p>In all other areas designated as open or limited for motorized travel:</p>	<p>The following areas would be closed to over-snow motorized travel:</p> <ul style="list-style-type: none"> areas closed to motorized travel (89,500 acres). <p>Over-snow motorized travel would be limited to primitive routes in lands with wilderness characteristics areas (except for the portion that overlaps with the Moosehead Mountain ACEC) (298,850 acres).</p> <p>Over-snow motorized travel would be limited to designated routes in:</p> <ul style="list-style-type: none"> big game severe winter ranges (276,905 acres); greater sage-grouse PHMA (102,654 acres, including some overlap with big game severe winter range); and 	<p>The following areas would be closed to over-snow motorized travel:</p> <ul style="list-style-type: none"> areas closed to motorized travel (197,924 acres). <p>Over-snow motorized travel would be limited to designated or primitive routes in:</p> <ul style="list-style-type: none"> lands with wilderness characteristics areas that are not designated as closed to motorized travel (222,270 acres); big game severe winter ranges (169,706 acres); big game winter concentration areas (94,986 acres); and Canada lynx habitat (2,332 acres). <p>In all other areas designated as open or limited for motorized travel:</p>

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
		<ul style="list-style-type: none"> There would be no minimum snow requirements for over-snow motorized travel on designated routes. There must be at least 18 inches of snow cover for over-snow motorized travel off of designated routes. 	<ul style="list-style-type: none"> Canada lynx habitat (2,332 acres). <p>In all other areas designated as open or limited for motorized travel:</p> <ul style="list-style-type: none"> There would be no minimum snow requirements for over-snow motorized travel on designated routes. There must be at least 18 inches of snow cover for over-snow motorized travel off of designated routes. 	<ul style="list-style-type: none"> There would be no minimum snow requirements for over-snow motorized travel on designated routes. There must be at least 18 inches of snow cover for over-snow motorized travel off of designated routes.
11	<p>In areas with limitations restricting vehicle travel to existing routes from October 1 to April 30, the following exceptions apply:</p> <ul style="list-style-type: none"> Vehicles may be allowed to travel up to 300 feet from an existing road, way or trail to park, camp, gather firewood, etc. as long as no damage is caused to resources; Hunters may use motorized vehicles to retrieve downed big 	<p>Within limited areas, the BLM would allow vehicles to park off of designated routes (pull off the route up to one vehicle width) but would not allow travel off of designated routes, including for activities such as dispersed camping, firewood gathering, harvesting of Christmas trees or posts and poles, or game retrieval.</p> <p>The BLM would not consider exceptions (other than those identified in 43 CFR 8340.05) to motorized travel restrictions.</p>	<p>Within limited areas, the BLM would allow motorized off-route travel of up to 100 ft from a designated route within areas limited to designated routes, including for activities such as dispersed camping, firewood gathering, harvesting of Christmas trees or posts and poles, or game retrieval.</p> <p>The BLM would not consider exceptions (other than those identified in 43 CFR 8340.05) to motorized travel restrictions.</p>	<p>Within limited areas, the BLM would allow vehicles to park off of routes for safety (pull off of routes for the minimum clearance to allow another vehicle to pass when driving or parking) but would not allow travel off of designated routes, including for activities such as dispersed camping, firewood gathering, harvesting of Christmas trees or posts and poles, or game retrieval.</p> <p>The BLM would not consider exceptions (other than those</p>

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
	<p>game as long as damage to resources does not occur;</p> <ul style="list-style-type: none"> Physically challenged individuals (Having CPW permit) may be allowed to continue travel off existing roads and trails during the limited months; and Emergencies involving threats to life and property. 			identified in 43 CFR 8340.05) to motorized travel restrictions.
12	No similar action.	<p>The BLM may consider exceptions for administrative use (BLM or permitted users):</p> <ul style="list-style-type: none"> to allow for motorized travel on temporary routes; to allow for motorized travel off designated routes within limited areas; to allow for motorized travel (either on or off-routes) within closed areas (except WSAs); and to allow for motorized travel on routes that are seasonally limited. <p>Permitted users must get prior written approval from the Authorized Officer to travel within these areas (including for any survey work necessary prior to submitting an application for a permit). Examples of permitted uses that could be considered include: cadastral and resource survey work, maintenance of existing facilities, weed treatments, reclamation, seismic surveys, wildlife capture work, vegetation treatments, maintenance of range improvement projects, placement of livestock mineral supplements, trailing livestock between allotments, and to allow for Native American's needs for collection and/or use of traditional resources and religious practices.</p> <p>The BLM would consider the following criteria when evaluating whether or not to grant an exception to motorized travel restrictions:</p> <ul style="list-style-type: none"> Is motorized use necessary to exercise a valid, existing right? Is motorized use consistent with other resource objectives? 		

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
		<ul style="list-style-type: none"> What time of year would the motorized use occur? What type of vehicle would be used? How many trips would be required? Is the motorized use required or could the proposed operation be conducted successfully without it? Does motorized use reduce impacts to other resources by reducing the time and intensity of proposed operations? Would motorized use compromise the intended function of route density targets (in Alternatives C and D)? <p>Actions necessary to restore areas affected by authorized off-route travel, such as defined vehicle tracks or routes created during wildfire suppression activities, would be implemented within one year of the incident.</p> <p>The BLM would allow off-route travel (without prior written approval) for:</p> <ul style="list-style-type: none"> Trailing and gathering livestock within an allotment; or Animal husbandry (such as tending a sick animal). <p>Prior written approval for any activity that involves off-route motorized travel would be required in closed areas.</p>		
13	No similar action	Access to private property through BLM parcels that are closed or seasonally closed would be provided through a right-of-way.		
14	No similar action.	Within WSAs, motorized use of primitive routes would be limited to authorized use by those with a valid existing right or a grandfathered use as defined in BLM Manual 6330 (Management of Wilderness Study Areas).		
15	The 1997 RMP is silent on mechanized travel (for example, bicycles) but the 2015 Oil and Gas RMPA prohibits mechanized travel in WSAs.	WSAs would be closed to mechanized travel, including the use of game carts (79,900 acres). Limit mechanized travel within the rest of the field office to designated routes. There would be no restrictions on the use of	WSAs would be closed to mechanized travel, including the use of game carts (79,900 acres). Limit mechanized travel within the rest of the field office to designated routes. There would	WSAs would be closed to mechanized travel, including the use of game carts (79,900 acres). The Moosehead, Oak Ridge, and riparian areas that are closed to

Table 1. Comparison of Alternatives – Goals, Objectives, and Allowable Uses

Record Number	Alternative A (Summary)	Alternative B	Alternative C	Alternative D (Preferred)
		game carts (except within WSAs).	<p>be no restrictions on the use of game carts (except within WSAs).</p> <p>Mechanized travel would be subject to the same big game and sage-grouse seasonal limitations as motorized travel (see record 9).</p> <p>Sub-alternative C: Mechanized travel would be subject to the same route density limitations as motorized travel (see Table 2, record 31).</p>	<p>motorized travel would also be closed to mechanized travel.</p> <p>Limit mechanized travel within the rest of the field office to designated routes.</p> <p>There would be no restrictions on the use of game carts (except within WSAs).</p> <p>Mechanized travel would be subject to the same route density limitations as motorized travel (see Table 2, record 31).</p>
16	No similar action.	Non-motorized and non-mechanized modes of travel (for example, foot and equestrian, including pack stock) are allowed on all BLM-managed lands and are not restricted by route designations (that is, cross-country travel is allowed unless otherwise specified). However, organized or commercial events (for example, Special Recreation Permits) may be subject to Conditions of Approval that restrict use consistent with the intent of those applied to mechanized or motorized forms of travel.		
17	No similar action.	<p>Close all BLM-managed waters (lakes, ponds, and reservoirs) to motorized use unless such use is consistent with the area's management objectives, and is authorized by the BLM Authorized Officer.</p> <p>There are no designated landing strips within the WRFO, however the BLM has permitted emergency helipads. All motorized aircraft, including but not limited to airplanes, helicopters, and ultralights, would be required to have a use authorization for take-off and landing locations on BLM-managed lands or waterways.</p>		

B.2.2. Management Actions

Land use plans must also identify criteria that would be used to guide day-to-day activities on public land. For travel management planning, these management actions would be used to guide decisions during implementation planning, including route-by-route designations, route maintenance, and evaluation of proposals to build new routes.

Table 2. Comparison of Alternatives – Management Actions

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
1	Planning Process	The above road designations will remain in effect until a site specific Travel Management Plan can be completed. (RMP page 2-45)	As interim management, motorized travel would be restricted to existing routes (as depicted on the 2014-2016 Travel Route Inventories). As TMPs are completed, motorized travel would be restricted to designated or primitive routes (in limited areas).
2	Planning Process	A Travel Management Plan will be completed using a public process that will help determine the following: <ul style="list-style-type: none">• If and where roads and trails will be closed;• Identify public needs such as construction of motorized or non-motorized trails; and• Determine the need for open areas;• Criteria will be integrated or developed in the plan, to help achieve established resource objectives, such as, stabilizing or reducing disruption of big game habitat use (that is, effective road density limitations) and preventing damage to riparian and aquatic habitats. (RMP page 2-45)	Travel Management Plans will be completed using a public process that will help determine: <ul style="list-style-type: none">• Which roads and trails will be designated for public use;• Additional access needs (such as construction of motorized or non-motorized routes); and• Additional criteria to consider when designating the transportation network to help achieve the “minimization criteria” outlined in 43 CFR 8342.1
3	Planning Process	All known roads and trails in the White River Resource Area will be entered into a GIS computer data base. The data base will then be used to help develop the travel management plan. (RMP page 2-45)	No similar action.
4	Planning Process	All roads and trails will be numbered during preparation of the Travel Management Plan.	No similar action.

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
		Numbering will be consistent with BLM policy and the transportation system. The numbered roads and trails and the computer data base will be updated and maintained on a regular basis. (RMP page 2-46)	
5	Planning Process	Roads and trails within designated areas (WSAs, ACECs and other limited or closed areas) will have maps prepared for public distribution and will be marked on the ground with signing. (RMP page 2-45)	No similar action.
6	Planning Process	As proposals for construction of new roads or trails are received, NEPA documentation will analyze impacts and determine appropriate designations and the potential for replacement of other existing roads. Criteria will be developed as part of the travel management planning process to aid in the determination for changing a particular area's road and trail designations, or adding/ closing roads and trails. Any road closures will be announced in the Federal Register but will not require an RMP amendment. (RMP page 2-46)	No similar action.
7	Access	Public and/or administrative access across private land will be identified for acquisition for areas having high public resource values with limited or no public or administrative access. (RMP page 2-53)	
8	Access	Administrative and public access will be obtained through acquisition of easements, acquisition of land through exchanges, road construction or renovation, or by other appropriate means. (RMP page 2-53)	
9	Access	Lands identified for public access enhancement include: 1) Large blocks of inaccessible BLM lands or lands with currently limited/restricted public access, 2) Smaller blocks of high demand or high interest BLM lands, and 3) Lands that will tie major open routes together. Map 2-27 shows some of the broad areas where:	In balance with other resource considerations, retain or provide travel route access to difficult to reach parcels of BLM public lands for hunting, fishing, and other recreation activities.

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
		a) public access needs to be enhanced; b) administrative access is needed; or c) both public and administrative access is needed. The type and degree of access acquired will be consistent with the management direction for, or emphasis of, the area to be accessed. These areas are not all inclusive however, and access activities may take place throughout the Resource Area, on a case by case basis, as opportunities arise. (RMP page 2-53)	
10	Access	Priorities for acquiring access will be identified for all areas needing access, generally through the transportation planning and integrated activity plan process. Plans will identify specific tracts of land or roads needed for public or administrative access. All access plans will include necessary NEPA documentation. (RMP page 2-54)	No similar action.
11	Access	The BLM will strive to secure public access to landlocked BLM Land fisheries that exceed 1/2 mile in length and are >1.5 miles from vehicular access. (RMP page 2-33)	No similar action.
12	Access	Acquire access in the Blue Mountain Geographic Reference Area (GRA) (North). (RMP page 2-41)	No similar action.
13	Access	Acquire WSA access in the Blue Mountain GRA (South). (RMP page 2-41)	No similar action.
14	Access	Designate/develop mountain bike routes connecting to Yampa Valley Trail in DNM, Harper's Corner Road to Town of Dinosaur, and Moosehead Mountain to Skull Creek Rim. (RMP page 2-41)	No similar action.

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
15	Access	Provide river access and establish launch sites/parking and interpretive facilities in the White River ACEC (Meeker to Kenny Reservoir). (RMP page 2-42)	No similar action.
16	Access	Provide river access; establish launch sites/parking and interpretive facilities; develop watchable wildlife sites and trails at Kenny Reservoir in partnership with others; and develop boat launch/parking above Shavetail Bridge in the White River ACEC (Kenny Reservoir to Shavetail Bridge). (RMP page 2-42)	No similar action.
17	Access	Securing public access to public lands will be a priority where demand, recreational values, and sufficient size warrants legal and/or physical access. This access would be acquired through easement, agreement, exchange or other means. (RMP page 2-43)	
18	Access	Develop motorized and non-motorized trails (e.g. mountain bike, hiking, horseback, ATV, 4-wheel drive, snowmobile, etc.) as demand/needs dictate in the White River ACEC (Shavetail Bridge to Utah Border). Trails may include but are not limited to: Rangely Loop, Dinosaur, Ute, Dominguez-Escalante, Scenery Gulch, Cathedral Bluffs, and China Wall/Lion Canyon/Lobo Mountain Trails. Develop links to other trails: Yampa Valley Trail, Kokopelli's Trail, Uinta Railroad into Utah, etc. (RMP page 2-44)	Develop motorized and non-motorized trails to meet public demand/need in a manner that provides reasonable protection for other resource values.
19	Access	Motorized vehicle travel for oil and gas activities (including pre-construction survey work) would be limited year-round to authorized routes or to existing routes that are limited seasonally in the 1997 White River RMP, identifiable from the 2011 National Agriculture Imagery Program (NAIP) digital data sets (921,000 acres). Routes newly constructed for oil and gas activities would be closed except to uses defined by the	Motorized vehicle travel for oil and gas activities (including pre-construction survey work) would be limited year-round to authorized routes (or prior to the BLM completing route designations, limited to existing routes (see Table 1, Record 8). Routes newly constructed for oil and gas activities would be closed except to uses defined by the Authorized Officer. Those uses would generally be limited to compliance, maintenance, drilling, and production activities.

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
		Authorized Officer. Those uses would generally be limited to compliance, maintenance, drilling, and production activities. (O/G RMPA page 2-37)	
20	Access	Well access routes would generally be unavailable for public vehicular access, including BLM permittees, not expressly associated with oil and gas development, production, monitoring, and maintenance. Exceptions would be evaluated on a case-by-case basis in the context of disturbance thresholds established for each seasonal range and leaseholding. Access routes constructed for oil and gas activities that are considered redundant or unneeded would be obliterated and reclaimed. (O/G RMPA page 2-38)	
21	Access	In areas of concentrated oil and gas development (for example, the geography encompassing acute/collective activity), vehicle use on BLM vehicle access networks (including existing roads, trails, and ways), where logistically practicable, would be temporarily limited to that associated directly with oil and gas development, production, and maintenance. Use by other BLM authorized land users could be considered, as determined by the Authorized Officer, consistent with big game management objectives. To be effective, this mitigation should control the use of vehicle access networks in areas of concentrated development rather than relying on controls applied to individual well access routes. (O/G RMPA page 2-37) In coordination with counties and authorized users, temporary route closures would be applied in areas with concentrated oil and gas development as needed to meet public health and safety or other resource concerns. (O/G RMPA page 2-38)	
22	Access	Public access rights will be reserved on all disposal tracts that control access to BLM lands. (RMP page 2-53)	
23	Fire Management	The following constraints will be applied to all fires on public lands: Stream crossing locations will be limited to existing roads and trails. (RMP page 2-55)	
24	Livestock Grazing	Livestock trailing use will be authorized to and from BLM grazing allotments along established trails on 9,600 acres of BLM land. Established trails include the White River Trail, Victory Trail, Dragon Trail, Yellow Jacket Trail, Ute Trail, and Staley Mine Trail, all collectively known as the White River Trail Allotment 6699. Crossing permits will be authorized on public land outside established trails on a case-by-case basis, based upon the applicant's need. (RMP page 2-23)	
25	Designation Criteria - General	No similar action.	Reduce impacts to upland soils, riparian areas, plant and animal communities, special status species, and water quality by closing, re-routing, or identifying mitigation in areas where routes are contributing to failure to meet Public Land Health Standards.
26	Designation Criteria - General	No similar action.	Consider route features, quality user experience, and route connectivity to determine appropriate route use type (that is, open, mechanized, ATV, UTV, foot, etc).

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
27	Designation Criteria – Soil & Water Resources	No similar action.	Implement seasonal or permanent closures, re-route routes, or identify mitigation necessary to reduce: <ul style="list-style-type: none"> • degradation of channels and floodplains for routes that have multiple stream crossings or are located primarily within a floodplain or channel of an ephemeral, intermittent, and perennial stream; • impacts to hillslopes with observed instability, active gully erosion, or having a landslide classification; • impacts to slopes > 35% with sensitive soils; • sediment laden stormwater runoff to 303d listed waterways from deeply incised or bermed routes; • point sources of erosion and resulting sedimentation and turbidity impacts in watersheds supporting populations of native cutthroat trout and BLM sensitive species; or • impacts to springs transected by a travel route.
28	Designation Criteria – Soil & Water Resources	No similar action.	Evaluate the travel route's current condition for necessary repair and maintenance [BLM Handbook 9113-2 (Roads National Inventory & Condition Assessment Guidance and Instructions) and BLM Handbook 9115-2 (Primitive Roads National Inventory and Condition Assessment Guidance and Maintenance)] when considering appropriate types of use and mitigation.
29	Designation Criteria – Air Quality	No similar action.	Minimize creation of fugitive dust by closing or re-routing routes located in soil types capable of generating dust easily transported by wind (that is, NRCS low resistivity soil types), or identifying mitigation necessary to reduce creation of fugitive dust.
30	Designation Criteria – Special Status Plants	No similar action.	Minimize potential impacts to special status plants and Remnant Vegetation Associations by reducing density of routes within occupied habitat for special status plants and identified RVAs.
31	Designation Criteria –	Existing roads and public utility Rights-of-Way (pipelines, power lines, and communication facilities) within known T/E habitat may be	Minimize impacts to special status plants by closing or re-routing routes within 100 meters of occupied habitat when possible, or identifying mitigation necessary to reduce impacts to special status plants.

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
	Special Status Plants	relocated if a determination is made that the relocation action will benefit and promote recovery and will not further impact a T/E plant species. (RMP page 2-18)	
32	Designation Criteria – Wildlife Route Density	<p>Road abandonments and seasonal closures during periods of animal occupation will be used, to the extent practical, to limit effective road densities to an average maximum 1.5 miles/square mile on big game critical habitats and three miles/ square mile on remaining big game ranges. Restrictions could be temporarily excepted to achieve special management needs (e.g. increase harvest). These road density objectives will be developed through site specific travel management or integrated activity plans. Special conditions of approval will be applied through the environmental analysis process to preclude or discourage continued vehicular traffic on linear rights-of-way within closed areas. (RMP page 2-29)</p> <p>Road abandonment and use limitations would be used to limit effective road densities in the long term to an average maximum 1.5 miles per square mile in higher value big game habitat (that is, defined severe winter range and summer range) and 3 miles per square mile on other big game ranges. (O/G RMPA page 2-38)</p> <p>Development of a travel management or integrated activity plan will implement effective road and trail density goals of 1.5 miles per square mile within the ferret recovery areas. (RMP page 2-35)</p> <p>Use of newly developed well access routes in black-footed ferret habitat would be limited to</p>	<p>Alternative B: No similar action.</p> <p>Alternative C: Within limited areas, manage route densities for motorized and mechanized vehicles so as not to exceed:</p> <ul style="list-style-type: none"> • 1.0 mile/square mile (mi/mi²): <ul style="list-style-type: none"> ○ LO7 Hill; ○ Within 2 miles of sage-grouse leks; • 1.5 mi/mi²: <ul style="list-style-type: none"> ○ East Douglas ACEC; ○ Wolf Creek and Coyote Basin Ferret Management Areas; ○ sage-grouse priority and general habitat; ○ big game severe winter range and summer range; and • 2.5 mi/mi²: <ul style="list-style-type: none"> ○ big game winter concentration areas and general winter range. <p>Alternative D (Preferred): Within a GMU (or defined area identified below), manage for overall route densities for motorized and mechanized vehicles so as to make progress towards achieving:</p> <ul style="list-style-type: none"> • 1.5 mi/mi²: <ul style="list-style-type: none"> ○ LO7 Hill ○ East Douglas ACEC; ○ Wolf Creek and Coyote Basin Ferret Management Areas; ○ big game severe winter range and summer range; and • 2.5 mi/mi²: <ul style="list-style-type: none"> ○ big game winter concentration areas and general winter range. <p>Route densities will be considered along with other resource values and uses, including public and administrative access needs, when making</p>

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
		<p>activities associated directly with oil and gas development, production, and maintenance. Access routes would be reduced to minimum standards during production and eliminated upon project completion. (O/G RMPA page 2-38)</p> <p>Motorized vehicle use associated with oil and gas development within the Wolf Creek black-footed ferret management area (including Coyote Basin and Snake John Reef units) would be restricted to authorized roads and trails area. Effective route and trail densities of no more than 1.5 miles per square mile would remain open for public vehicular travel in these areas. (O/G RMPA page 2-38)</p> <p>Development of a travel management plan or integrated activity plan will include the establishment of an effective road density limit of 1.5 miles per square mile within the East Douglas ACEC. (RMP page 2-36)</p> <p>Road density objectives, where appropriate to fishery and wildlife issues, will be implemented through a Travel Management Plan or integrated activity plans developed subsequent to this RMP. (RMP page 2-37)</p>	<p>travel route management decisions and are not intended to be the only consideration for travel route management decisions.</p> <p>Route density is an analysis tool and not an allocation decision. It is recognized that as route density targets are exceeded, increasingly severe negative impacts to wildlife populations are expected. It is imperative to recognize that this process would require a phased approach, over time, to make progress towards achieving effective road density values in those areas that exceed identified route densities.</p>
33	Designation Criteria – Special Status Raptors	Where compatible with other resource objectives, consider applying seasonal timing restrictions to roads or trails within 0.5 miles of special status raptor nests if appropriate. Seasonal timing restrictions would be consistent with those timeframes established in the in the 2015 Oil and Gas Development RMPA.	
34	Designation Criteria – Big Game	Where compatible with other resources, consider applying seasonal timing restrictions to roads or trails in big game severe winter range and summer range if appropriate.	

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
35	Designation Criteria – White-tailed prairie dog and associates	Where compatible with other resource objectives consider route abandonment, re-routing, limiting to administrative use only, or applying seasonal timing restrictions to roads or trails in prairie dog colonies outside of designated management areas. Timing restrictions would be consistent with those timeframes established in the 2015 Oil and Gas Development RMPA.	
36	Designation Criteria – Special Status Animal Species	Where compatible with other resource objectives consider route abandonment, re-routing, limiting to administrative use only, or applying seasonal timing restrictions to roads or trails where appropriate.	
37	Designation Criteria – Lynx	Use of newly developed well access routes in lynx habitat would be limited to that associated directly with oil and gas development, production, and maintenance activity. Access routes would be reduced to minimum standards during production and eliminated upon project completion. (O/G RMPA page 2-38)	
38	Designation Criteria – Lynx	The BLM would request that maximum efforts be applied to reduce the extent and effective utility of snow compaction or removal activities in lynx habitat as travel corridors for competitive carnivores. Use of over-the-snow vehicles would be prohibited for use in lynx habitat during project-related reconnaissance, on-site inspections, or surveys. (O/G RMPA page 2-38)	
39	Designation Criteria – Lynx	No similar action.	Minimize impacts to Canada lynx winter use habitat by designating the minimum necessary thoroughfare that provides singular access to private lands and continuity between U.S. Forest Service lands that allow for over-snow motorized travel.
40	Designation Criteria – Sage-Grouse	Complete activity level travel plans as soon as possible in sage-grouse PHMA, subject to funding. During activity level planning, where appropriate, designate routes with current administrative/agency purpose or need to administrative access only. (GRSG RMPA page 2-23)	
41	Designation Criteria –	Within sage-grouse PHMA, allow upgrades to existing routes after documenting that the upgrade will not adversely affect GRSG populations due to habitat loss or disruptive activities. (GRSG RMPA page 2-24)	

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
	Sage-Grouse		
42	Designation Criteria – Sage-Grouse	Within sage-grouse PHMA, conduct restoration of roads, primitive roads and trails not designated in travel management plans. This also includes primitive route/roads that were not designated in WSAs and within lands with wilderness characteristics that have been selected for protection in previous land use plans. (GRSG RMPA page 2-24)	
43	Designation Criteria – Sage-Grouse	Within sage-grouse PHMA, when reseeding roads, primitive roads and trails, use appropriate seed mixes and consider the use of transplanted sagebrush. (GRSG RMPA page 2-24)	
44	Designation Criteria – Wild Horses	No similar action.	Provide access for public viewing of wild horses within the Piceance-East Douglas Herd Management Area.
45	Designation Criteria – Wild Horses	No similar action.	Reduce duplicative or redundant routes where necessary to protect habitat and reduce disturbance or displacement of wild horses by human activity.
46	Designation Criteria – Cultural Resources	No similar action.	Minimize ongoing or potential impacts to cultural resources that are listed on the National Register of Historic Places, or are eligible or potentially eligible for listing. Close routes that are inside, pass through, or lead directly to these sites, or identify mitigation necessary to protect sites if these routes are designated open to travel.
47	Designation Criteria – Cultural Resources	No similar action.	Minimize potential impacts to cultural resources by reducing density of routes in areas known to be in areas with a high cultural resource density or areas of high value to the cultural program or Tribes.
48	Designation Criteria –	No similar action.	Minimize ongoing or potential impacts to known paleontological sites. Close routes that are inside or pass through paleontological localities if

Record Number	Topic	Alternative A	Alternatives B, C, and D (Preferred)
	Paleontological Resources		travel on these routes is adversely affecting paleontological resources, or identify mitigation necessary to protect paleontological sites.
49	Designation Criteria – WSAs	No similar action.	Close and reclaim all routes receiving motorized use in Wilderness Study Areas that are not needed to access pre-FLMPA rangeland improvements or any other valid-existing rights.
50	New Route Construction	No similar action.	Siting considerations for establishment of new routes and trails would be subject to those wildlife management goals, objectives, and management actions as described in the 2015 Oil and Gas Development RMPA (e.g., raptor NSO and TL stipulations, migratory bird habitat siting criteria).
51	Construction of New Routes	New road construction or improving/maintaining primitive roads would not be allowed within Tier 1 areas, and would be allowed in Tier 2 and Tier 3 areas. Appropriate COAs (as described below) may be applied. (O/G RMPA page 2-43)	
52	Construction of New Routes	Within sage-grouse PHMA, use existing roads or realignments whenever possible. If it is necessary to build a new road, and the use of existing roads would cause adverse impacts to GRSG, construct new roads to the appropriate minimum Gold Book standard and add the surface disturbance to the total disturbance in the priority habitat management area if it meets the criteria in Appendix H of the Sage-Grouse ROD (Guidelines for Implementation and Adaptive Management). (GRSG RMPA page 2-23) Construct no new roads if the biologically significant unit (Colorado populations) and proposed project analysis area (Colorado Management Zone) is over the 3% disturbance cap (see Appendix E of the Sage-Grouse ROD), unless there is an immediate health and safety need, or to support valid existing rights that cannot be avoided. Evaluate and implement additional, effective mitigation necessary to offset the resulting loss of sage-grouse habitat. (GRSG RMPA page 2-24)	
53	Construction of New Routes	Complete activity level travel plans as soon as possible in sage-grouse PHMA, subject to funding. Limit route construction to routes that will not adversely affect GRSG populations due to habitat loss or disruptive activities. (GRSG RMPA page 2-23 and 2-24)	
54	Construction of New Routes	No similar action.	Construction of new routes would not be permitted within ROW exclusion areas to minimize impacts to the resources for which those exclusion areas were established.

B.3. Alternatives Considered but Eliminated from Detailed Analysis

Based on scoping comments, preliminary planning issues, and public comment on the preliminary alternatives, the WRFO considered several alternatives that were subsequently eliminated from detailed analysis.

B.3.1. Planning Process

1. Combine travel management planning with recreation management planning and consider designation of Special Recreation Management Areas (SRMAs). The BLM considered whether to conduct travel management and recreation management planning simultaneously, and decided to keep the scope of this planning effort focused on travel management. An expanded scope to include recreation management, would require making decisions on a variety of issues such as designation of SRMAs, designation of Backcountry Conservation Areas (BCAs), target shooting, allocation of special recreation permits, etc. This would be beyond the purpose and need of this travel management planning effort.

B.3.2. Open Areas

2. Designate the entire Rangely Rock Crawling Park as open for motorized travel.

Alternatives B and C consider managing the rock slabs within the Rangely Rock Crawling Park as open areas. However, the WRFO did not conduct a detailed analysis for managing the entire park as an open area due to resource concerns. There is habitat for several special status plants, the Duchesne milkvetch (*Astragalus duchesnensis*), Rollins cryptanth (*Cryptantha rollinsii*), and debris milkvetch (*Astragalus detritalis*), within the park and one population is close to the competition area. There were also concerns about physical damage to riparian and wetland areas associated with driving through these areas. There are also cultural resources located within the park, including sites that are eligible for listing on the National Register of Historic Places.

3. Within the Rangely Rock Crawling Park, extend the open areas at least 100 ft beyond the rock slab edges to provide safe use of these sites. Most of the rock slabs have specific entry and exit locations and so it was not necessary to extend the open areas with a default buffer around the rock slabs. Also, in some cases, expanding the boundary outside of the rock slabs could result in impacts to cultural resources.

4. Expand the LO7 open area to accommodate long range target shooting. The public suggested expanding the proposed LO7 open area to the southeast to accommodate long range target shooting. The designation of a target shooting area is outside the scope of this planning effort since that would be a recreation decision rather than a travel management decision. Establishing a target shooting area in the same place as an OHV open area would also likely result in user conflicts and safety concerns, especially since the BLM envisions the LO7 open area serving as a training area for inexperienced riders.

5. Identify another open area near Dinosaur and Snake John Reef. During public review of the preliminary alternatives, The Wilderness Society expressed concerns about potential impacts

from the proposed North Dinosaur open area to nearby lands with wilderness characteristics units and wilderness study areas. They suggested a more appropriate open area near Dinosaur may be “where BLM lands abut the town on its southwest edge near Snake John Reef”. This area (T3N, R104W, Section 12) was considered but eliminated since it is currently accessed by crossing private property or by traveling several miles across BLM land from the south.

B.3.3. Closed Areas

6. Close portions of LO7 Hill to motorized and mechanized use (east of the open area).

During Cooperating Agency review of the preliminary alternatives, CPW proposed to manage the majority of LO7 Hill (east of the open area) as closed to motorized and mechanized travel (and available to foot and horseback travel) to minimize impacts to big game. LO7 Hill supports inordinately large numbers of elk and deer throughout the year. LO7 Hill is also a popular recreation area that is close to the Town of Meeker. The BLM and CPW considered potential impacts to big game as well as recreational demands and determined that wildlife concerns could be addressed during designation of individual routes. Under Subalternative C, the BLM would consider managing LO7 Hill with a route density of 1.0 mi/mi² to reduce impacts to big game while still providing some motorized and mechanized access.

7. Designate Canyon Pintado National Historic District (NHD) as closed to motorized travel. The WRFO received scoping comments requesting that Canyon Pintado NHD be closed to motorized travel to reduce impacts to important cultural sites. The WRFO did not include such restrictions in the alternatives since Canyon Pintado NHD is bisected by State Highway 139 and includes existing oil and gas infrastructure as well as BLM developed recreation sites (which focus on interpretation of cultural sites). The WRFO is working with the Colorado State Historic Preservation Officer to develop a Programmatic Agreement which addresses how the WRFO should evaluate and manage impacts to cultural sites associated with travel management.

8. Manage all ROW exclusion areas as closed to motorized travel, including the South Cathedral Bluffs, Raven Ridge, Coal Draw, and Black’s Gulch ACECs and areas within 330 feet of occupied habitat for federally listed and proposed plants. While some ROW exclusion areas were proposed to be managed as closed to motorized travel (for example, WSAs), it is not always necessary to manage all ROW exclusion areas as closed areas. The purpose of exclusion areas is to avoid construction of new ROWs (not only roads but also pipelines, power lines, certain facilities, etc) within sensitive areas. Motorized travel within most ACECs (including South Cathedral Bluffs, Raven Ridge, Coal Draw, and Black’s Gulch) is currently limited to designated routes and the WRFO may close individual routes within these areas if they are affecting the important resources that the ACECs were designated to protect.

9. Designate sage-grouse priority habitat management areas as closed to motorized travel.

The BLM contends that circumstances in each population area argue against the need for, or efficacy of, route closures across all PHMA. With large tracts of connected habitat and stable long-term population trends, the Northwest Colorado population area, Colorado’s largest, is considered at low risk of extirpation. Specific management concerns have not been identified in the southwest portion of the population area managed by the WRFO. Terrain-related constraints and overall land ownership patterns, as supplemented by road restrictions instituted on various BLM-administered lands (e.g., Moosehead Mountain and Wolf Creek ferret management area), help reduce the inherent risk of travel-related impacts on sage-grouse.

The Meeker-White River population area and control of its associated access is almost exclusively privately-owned (e.g., 98 percent of PHMA). Travel closures applied to small, scattered, and largely land-locked BLM holdings would have no likelihood of benefitting this sage-grouse population.

The PPR population is considered to be at high risk of extirpation, primarily due to energy development and the need for a supporting transportation system. However, a majority of the habitats designated as “priority areas for conservation” (PACS) are privately owned with privately-controlled access (FWS 2013, page 88). Those portions of the PPR that are predominantly BLM-administered, although possessing an extensive and largely unregulated route network, generally represent the more peripheral north and east extensions of the PPR’s core distribution. Rather than close all of PHMA to motorized travel, the WRFO coordinated with CPW to identify seasonal limitations and route density limitations that would be important in minimizing impacts to sage-grouse while continuing to accommodate a wide range of recreation opportunity.

B.3.4. *Lands with Wilderness Characteristics*

10. Apply seasonal limitations on motorized travel in Tier 2 lands with wilderness characteristics areas during big game hunting seasons and critical winter use periods. The WRFO received scoping comments that Tier 2 lands with wilderness characteristics should be managed with seasonal limitations on motorized travel during big game hunting seasons and critical winter use periods to meet the intended use of these areas as a balance between wilderness characteristics and other uses. The WRFO did not include such limitations in the alternatives since the lands with wilderness characteristics areas were inventoried based on the presence of wilderness characteristics as outlined in BLM Manual 6310 and these areas do not necessarily overlap with critical big game use areas.

B.3.5. *Route Density*

11. Manage big game migration corridors and winter concentration areas for a route density of 1 mi/mi². In some cases, deer migration corridors are delineated as narrow linear features paralleling ridgelines that coincide with the practical positioning of roaded access. These topographically confined corridors are not suited to meaningful application of a 1 mi/mi² route density prescription. In other cases, movement patterns are predominately represented by broader swaths of summer range where prescriptions of 1.5 mi/mi² have been proposed. Owing largely to terrain constraints, analysis and experience suggests that a route density of 1.5 mi/mi² is the lowest practical route density that can be achieved across the extensive public land base without compromising the fundamental framework of the public land access network. Recent CPW research in the Piceance Basin (Northrup 2016) does not suggest that roads and their use seriously impede seasonal deer movements or impose significantly on the nutritional or energetic status of deer in transition.

Winter concentration areas are not considered functionally superior to summer range or severe winter range in supporting big game populations in the Planning Area. Winter concentration areas are often located at higher elevations and occupied only during the fall and earlier winter months where and when forage is more available and nutritious.

12. Include temporary routes (oil and gas access routes) in the route density calculations since these may be gravel roads that are used for decades. Temporary routes that access oil and gas infrastructure are not proposed to be included in route density calculations during subsequent implementation planning since these routes are managed under the thresholds in the 2015 Oil and Gas Development RMPA. Oil and gas access routes differ from other routes that are available to the public since the BLM and industry can control and monitor the level of use. Also, the public transportation network is anticipated to remain relatively static (little change in the location or number of routes) compared to temporary access associated with oil and gas development which shifts in location (new roads built, old roads reclaimed) and level of use depending on development phase. However, we have calculated and disclosed the estimated route densities under various alternatives both with and without oil and gas access routes (see Appendix E).

13. Include routes that are seasonally closed in the route density calculations. Seasonal closure areas and route density offer different and mutually compatible means to reduce vehicle-related influences on wildlife—one being localized, not explicitly requiring modification to existing road networks, and capable of targeting discrete high-value habitats and the other applied broadly at large landscape levels. Overall route density calculations discounted routes within seasonal closures if they provided functional relief from vehicle-related effects at levels comparable to yearlong closures. Seasonal closures that were considered comparable to yearlong closures included big game seasonal winter closures, which span timeframes that typically capture the entire period of range occupation by big game, and sage-grouse seasonal closures, which encompass the birds' more vulnerable breeding, nesting, and brood-rearing functions that drive crucial population-level demographics (e.g., survival, recruitment).

B.3.6. Access

14. Identify landlocked parcels and other parcels that are inaccessible and develop strategies for providing access to those lands. Alternative A (Figure 16) includes a map of areas identified in the 1997 RMP. Under Alternatives B-D, the BLM would remove this map from the RMP and not replace it. The interdisciplinary team discussed various revisions to the existing map and ultimately decided that it was not helpful in procuring improved public access (e.g., it was unlikely to result in a private landowner approaching the BLM with the offer to establish a public easement). Rather than developing a specific map, the BLM would seek to improve public access and evaluate proposals on a case-by-case basis.

15. Provide no exceptions for off-route motorized travel for camping, firewood gathering, or big game retrieval. The WRFO considered whether there should never be an exception for off-route motorized travel for camping, firewood gathering, or big game retrieval. While there may be legitimate concerns about the potential for resource damage with any off-route travel, those concerns were outweighed by concerns for public safety. The WRFO wants to allow for vehicles to be moved off the route to park rather than have people forced to park their vehicles in the road which would be a safety issue for other drivers and also could impact the effectiveness of the transportation network itself if routes are blocked by parked vehicles.

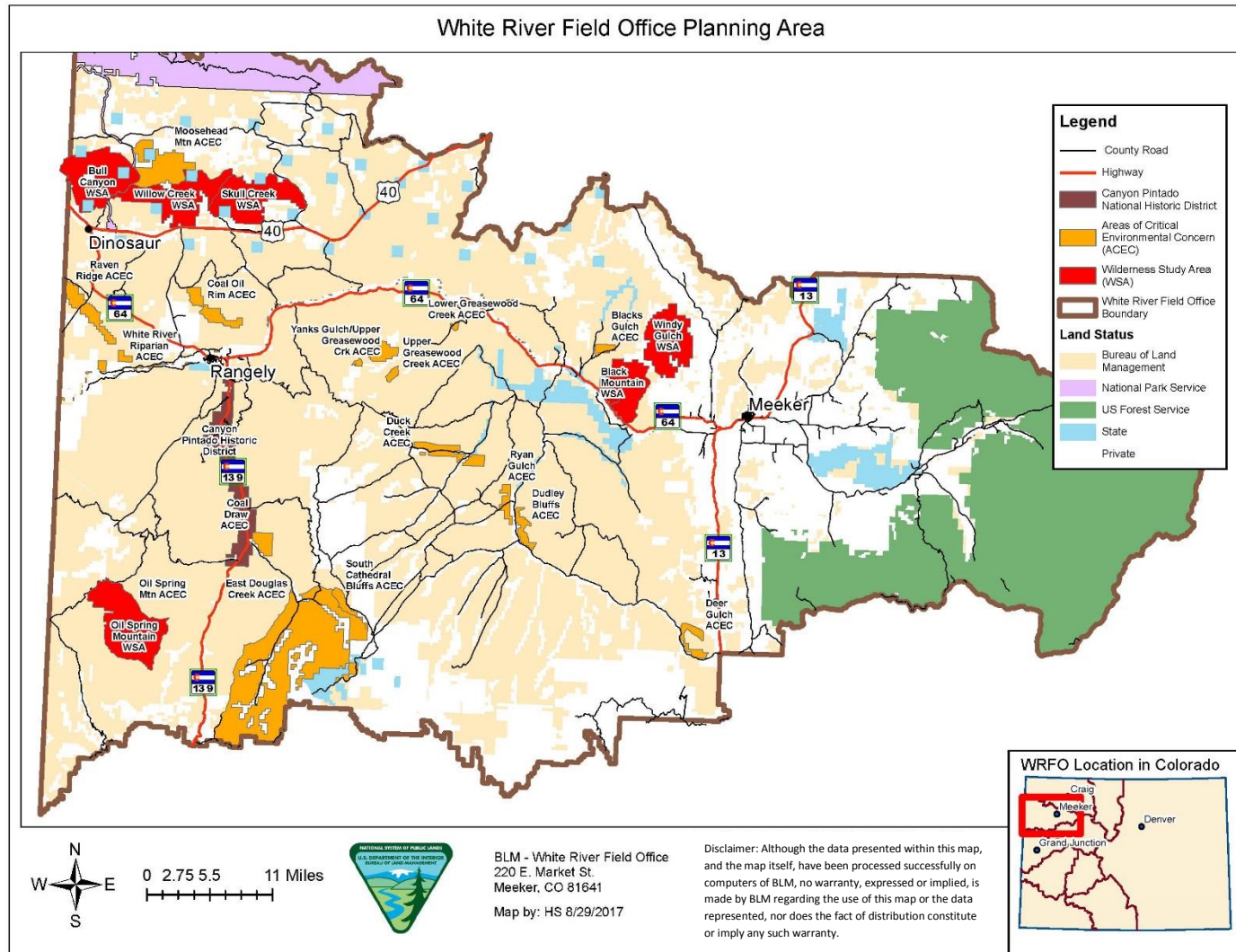
16. Limit mechanized travel to designated routes for only a portion of the field office (rather than the entire field office). The BLM considered only limiting mechanized travel to designated routes within 1) areas closed to motorized travel, 2) all (designated) ACECs, 3)

potential ACECs, and 4) occupied habitat for threatened plants within the Piceance Basin. However, several Cooperating Agencies expressed concern with leaving the majority of the field office as “open” for mechanized travel (i.e., not restricted to designated routes). Mechanized travel is currently not as popular within the WRFO as it is other regional areas (such as in Routt and Mesa counties), but the Cooperating Agencies urged the BLM to consider long-term recreation trends and the potential for impacts to special status plant species, cultural resources, and wildlife if bicycles were permitted to travel off of designated routes.

17. Use seasonal limitations to restrict travel associated with antler shed hunting. The BLM considered using seasonal travel limitations to reduce potential harassment and displacement of big game during the late winter due to antler shed hunting. However, the BLM was mindful that CPW has the authority to “establish and enforce closures of, or restrictions on, lands and waters of the state to hunting, fishing or other wildlife-related recreation, including but not limited to the collection of shed antlers” (CPW Wildlife Regulations, Chapter W-00, Article XI, #020.F.1). In January 2018, the Colorado Parks and Wildlife Commission approved a seasonal closure on shed antler and horn collection on all public lands west of Interstate 25 from January 1 through April 30 annually.

Appendix C. RMPA Maps

Figure 1. White River Field Office Planning Area



C.1. Motorized Travel

Figure 2. Alternative A – OHV Area Designations

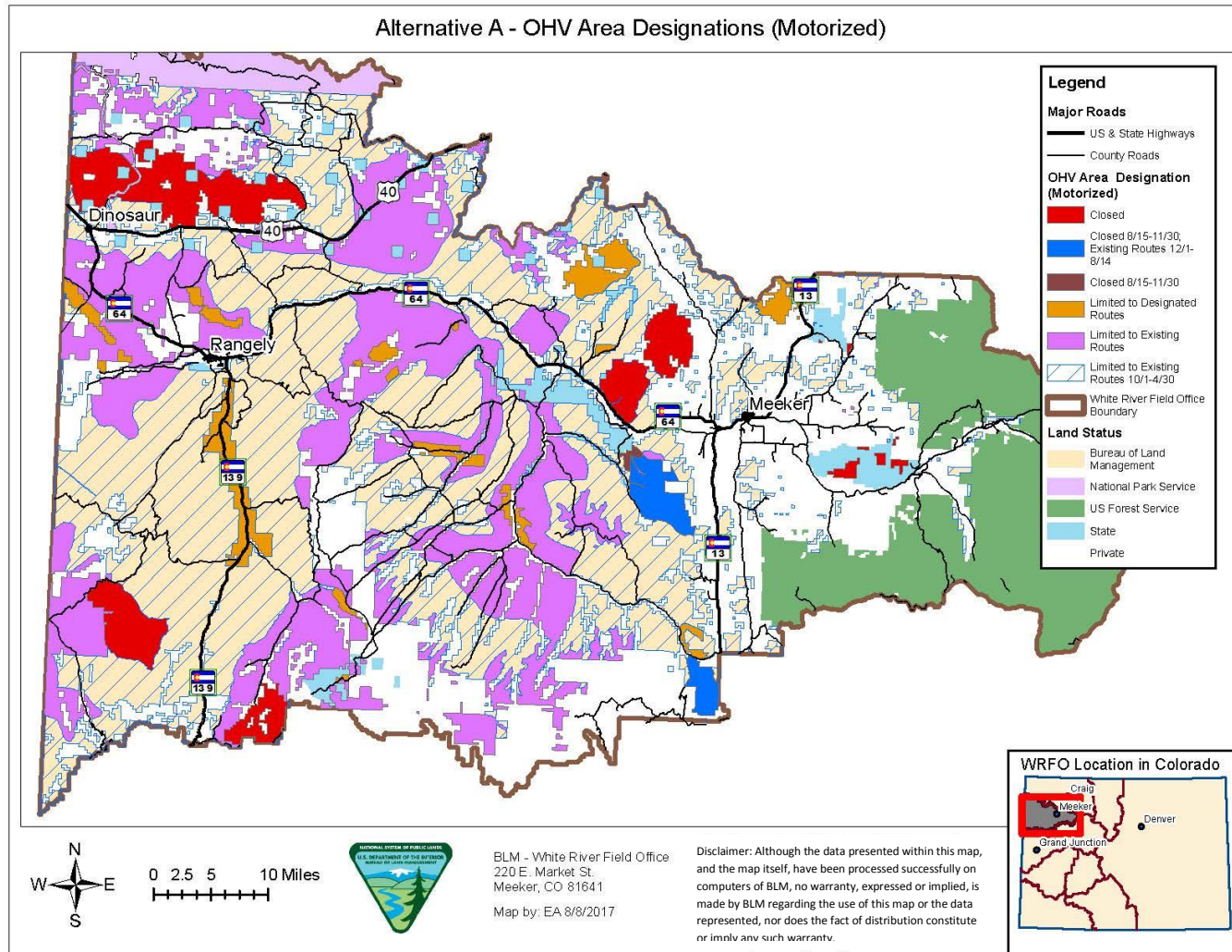


Figure 3. Alternative B – OHV Area Designations (Motorized Travel)

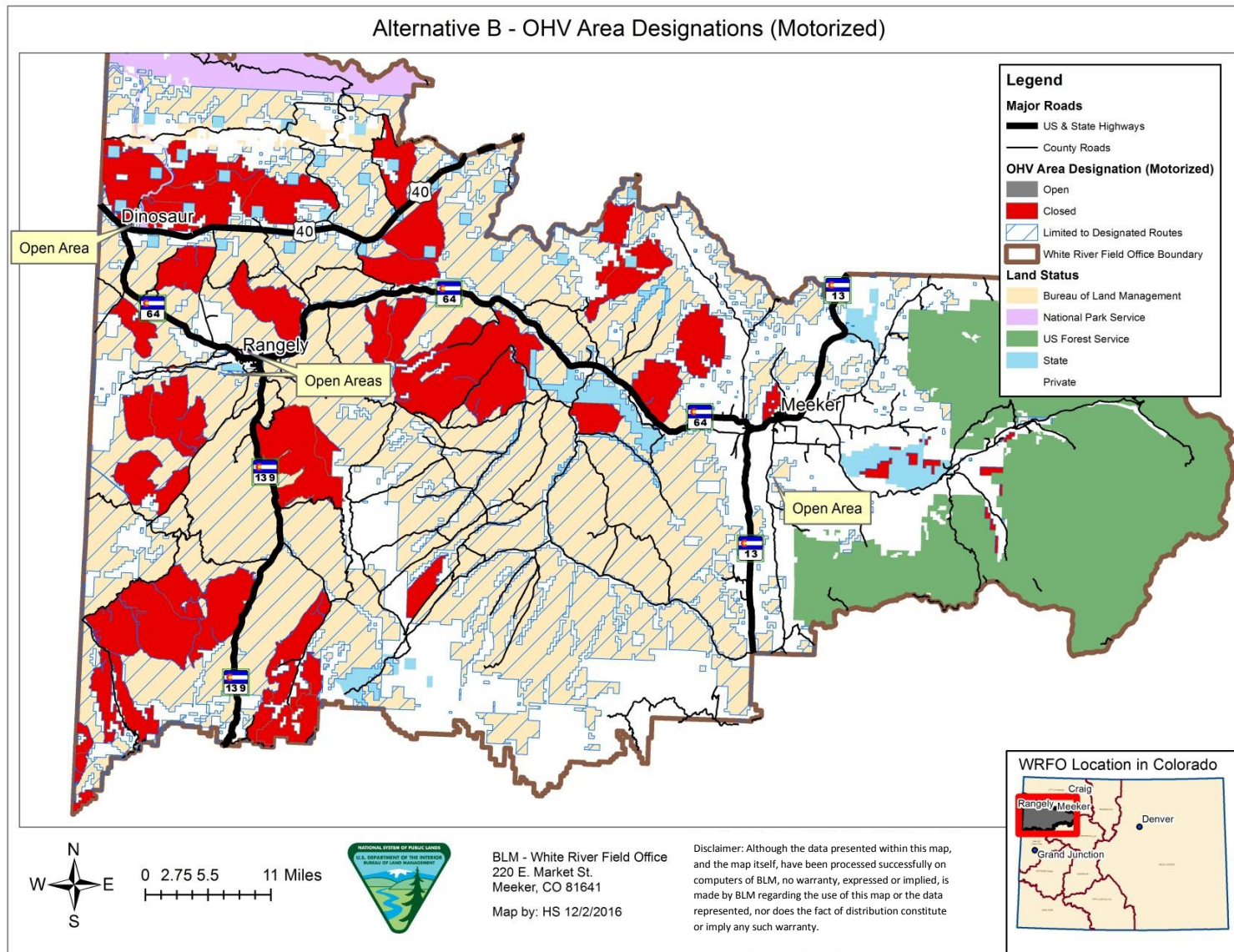


Figure 4. Alternative C – OHV Area Designations (Motorized Travel)

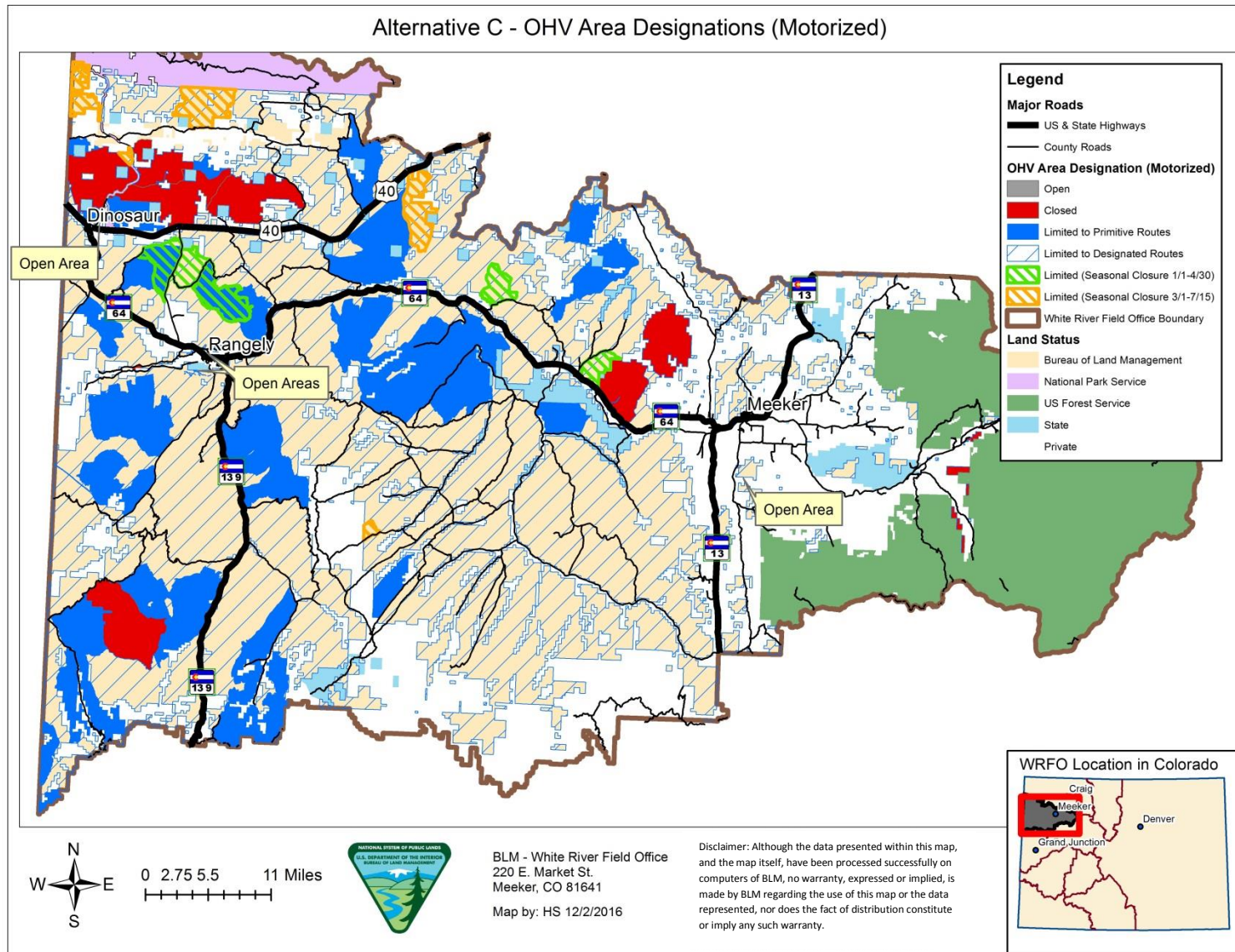


Figure 5. Alternative D – OHV Area Designations (Motorized Travel)

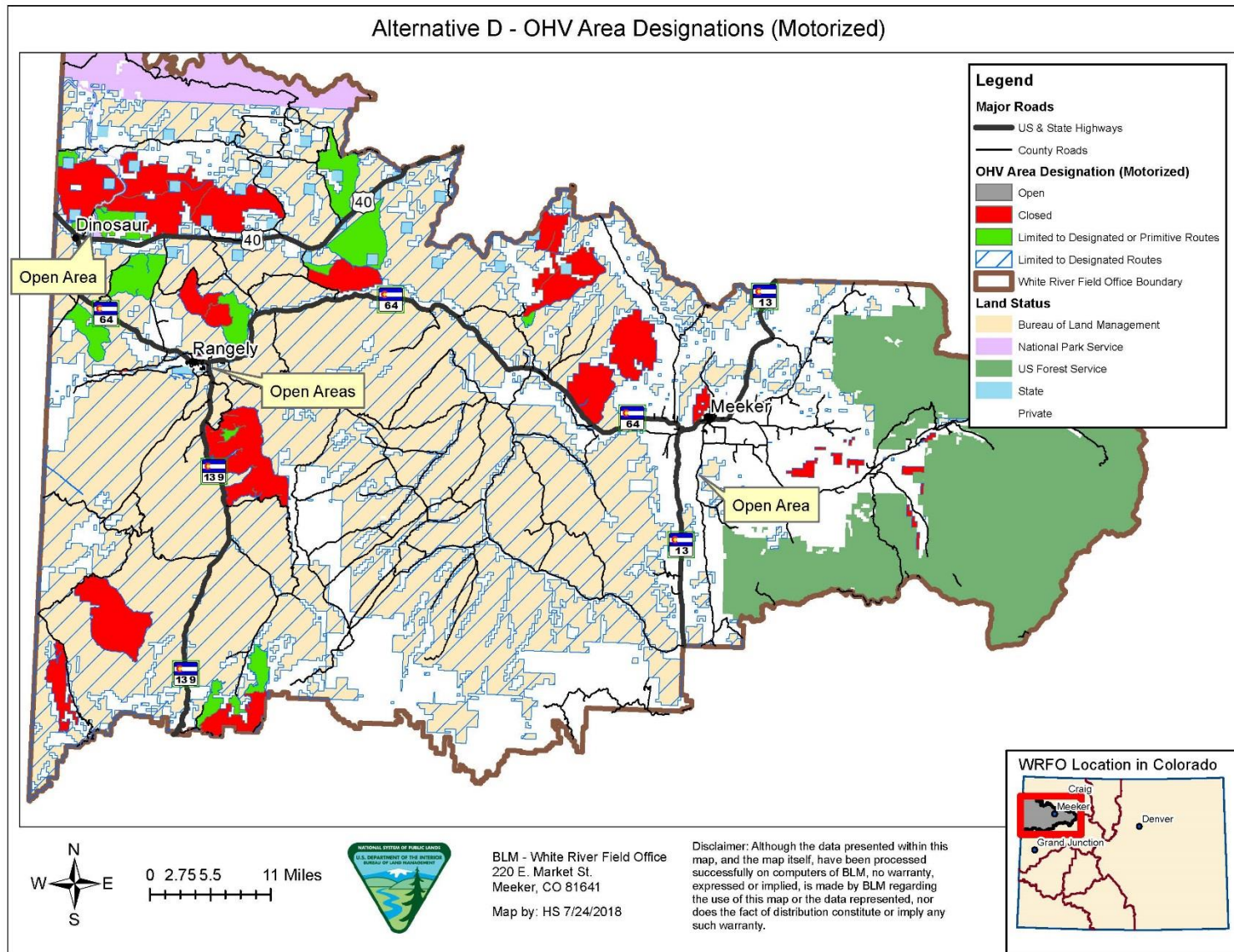
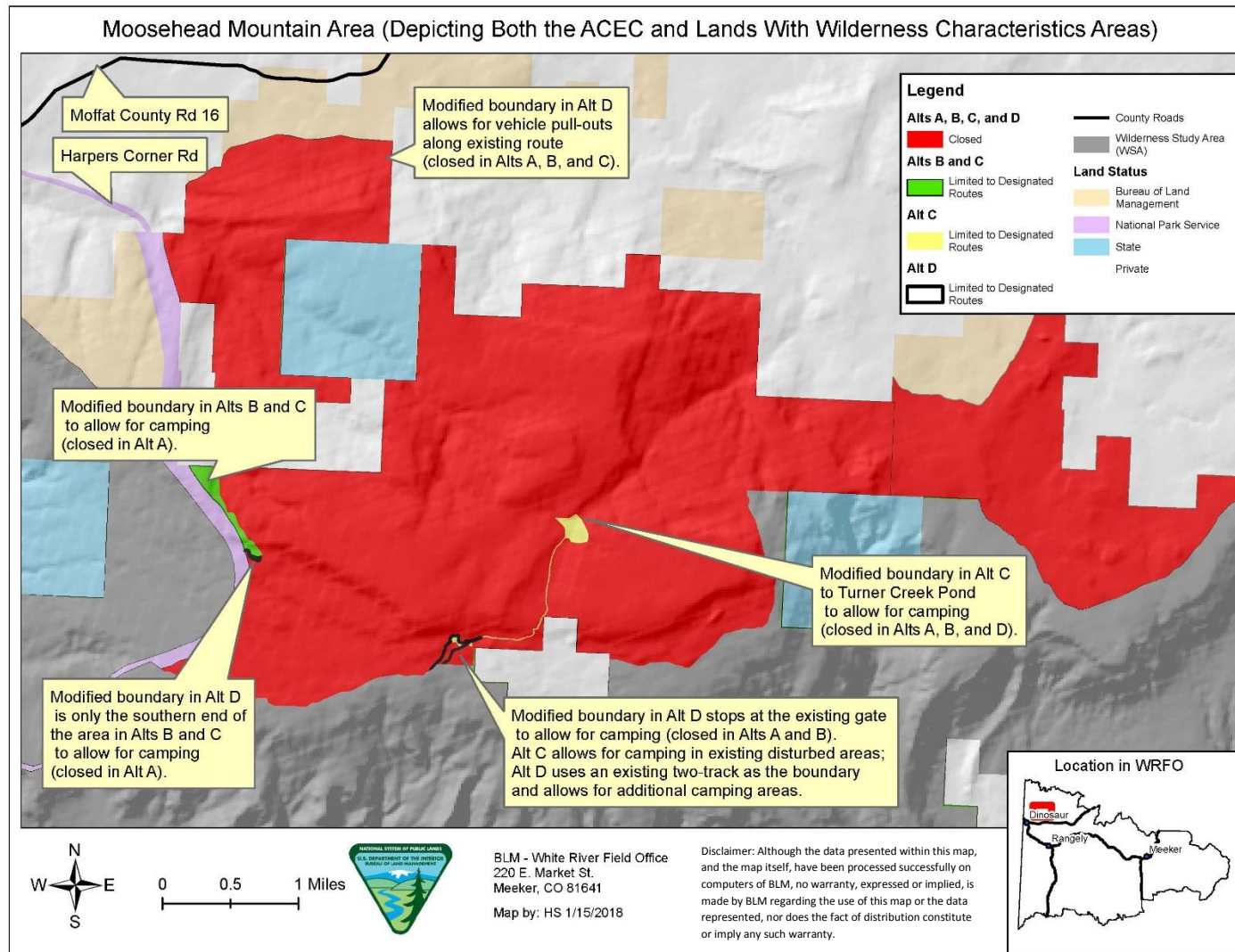


Figure 6. Motorized Travel on Moosehead Mountain



C.1.1. Open Areas

Figure 7. Alternatives B, C, and D – LO7 Hill Open Area

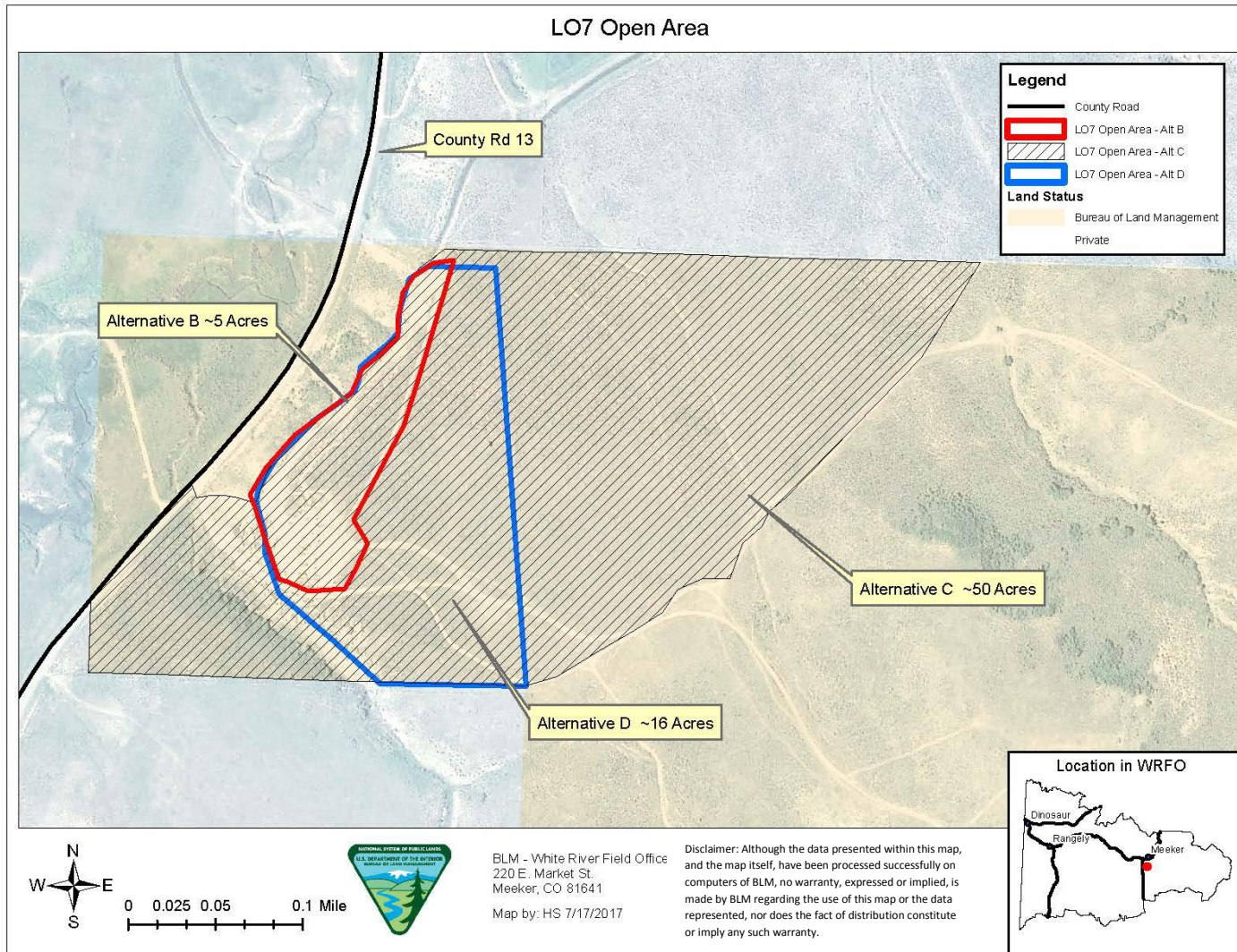


Figure 8. Alternatives B, C, D – Rangely Rock Crawling Park Open Areas

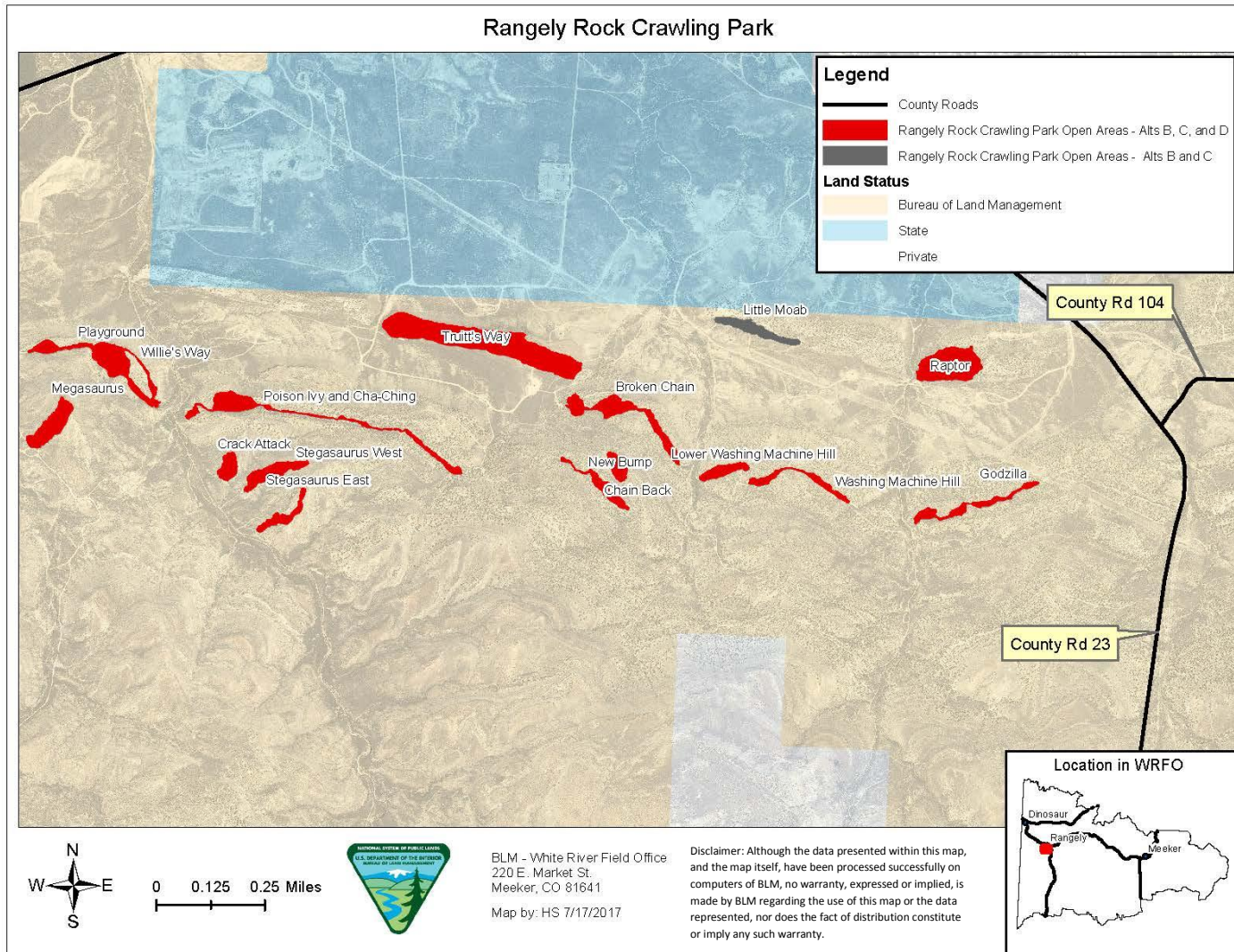


Figure 9. Alternatives B, C, and D – North Rangely Open Area

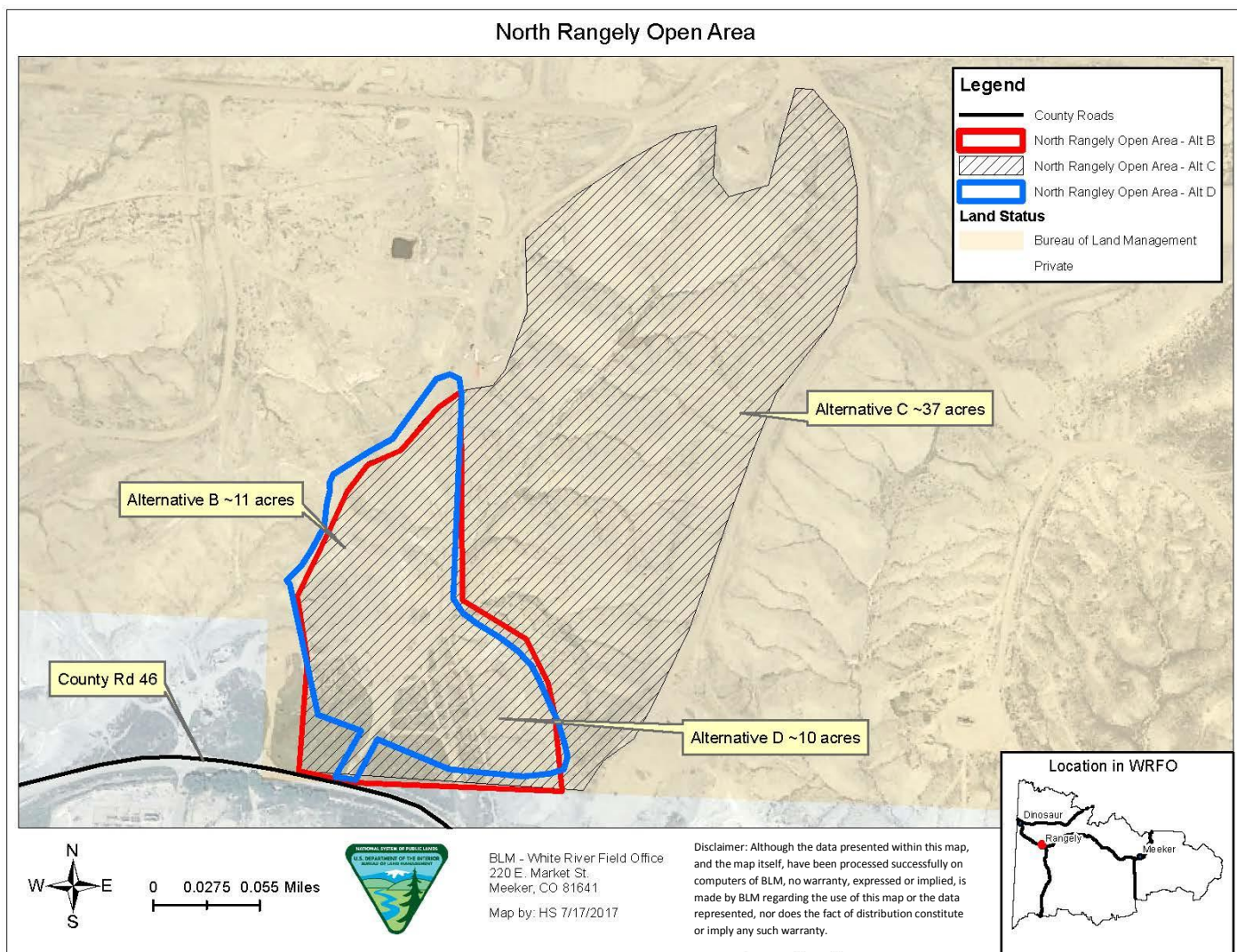
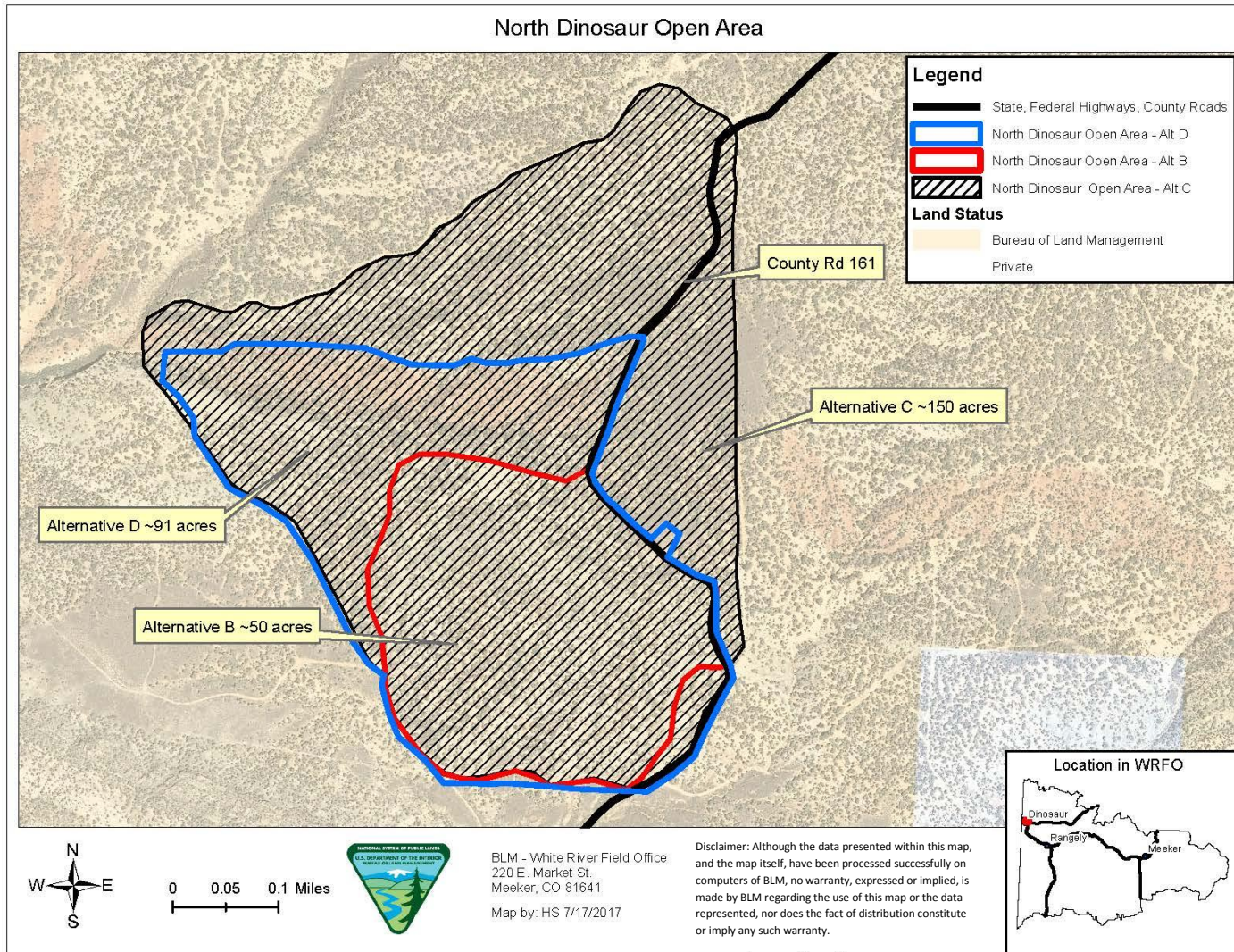


Figure 10. Alternatives B, C, and D – North Dinosaur Open Area



C.1.2. Over Snow Motorized Travel

Figure 11. Alternative A – Motorized Over-Snow Travel

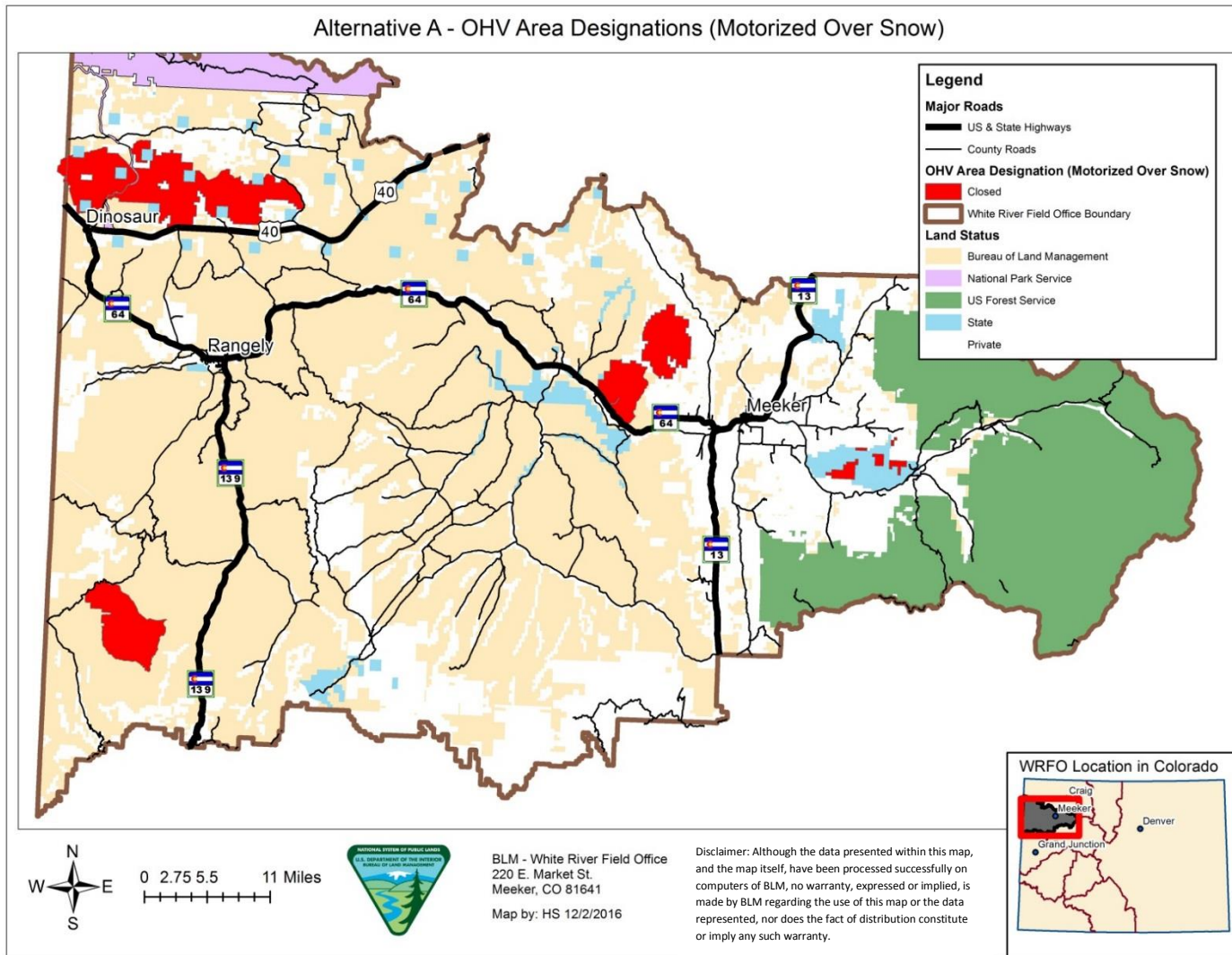


Figure 12. Alternative B – Motorized Over-Snow Travel

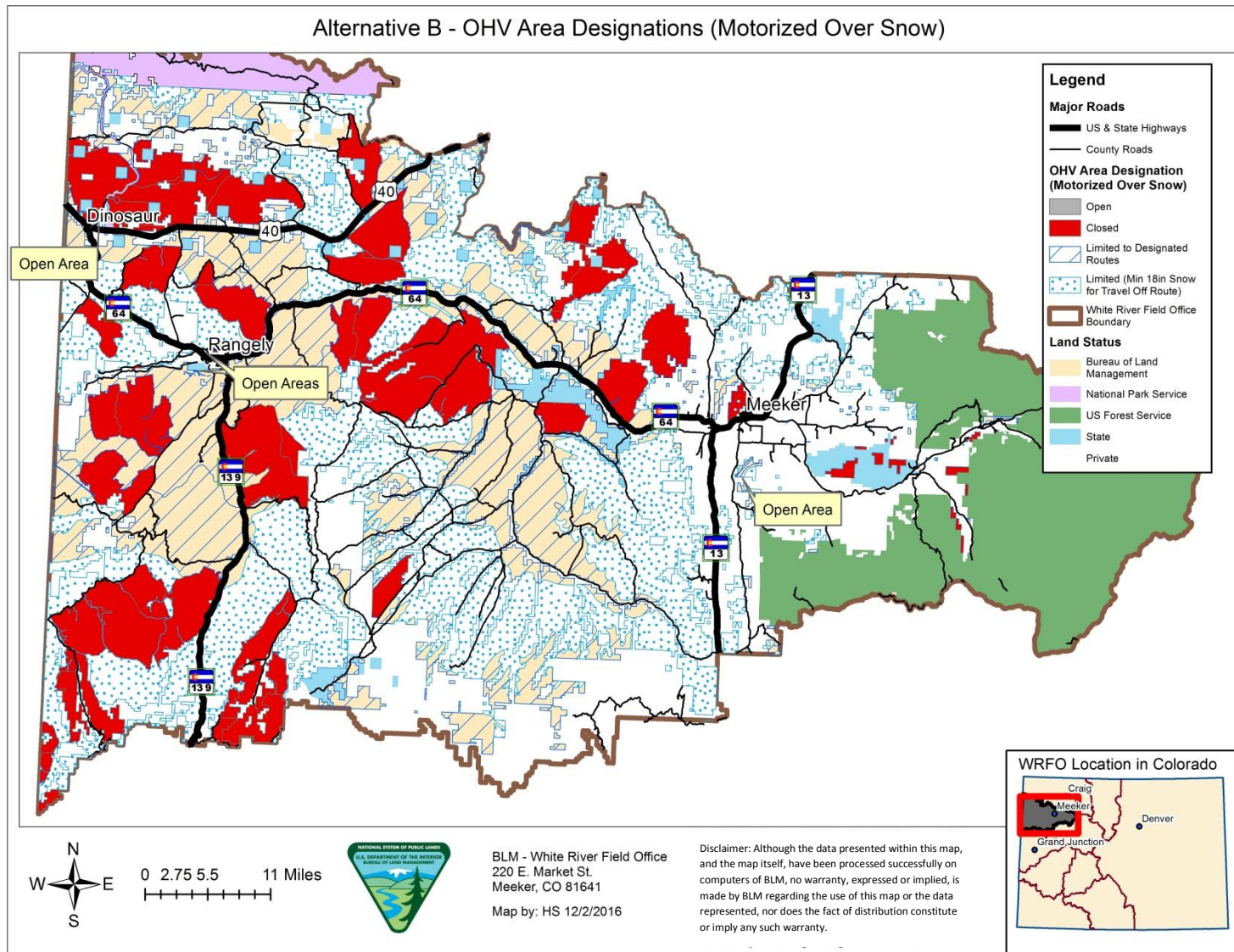


Figure 13. Alternative C – Motorized Over-Snow Travel

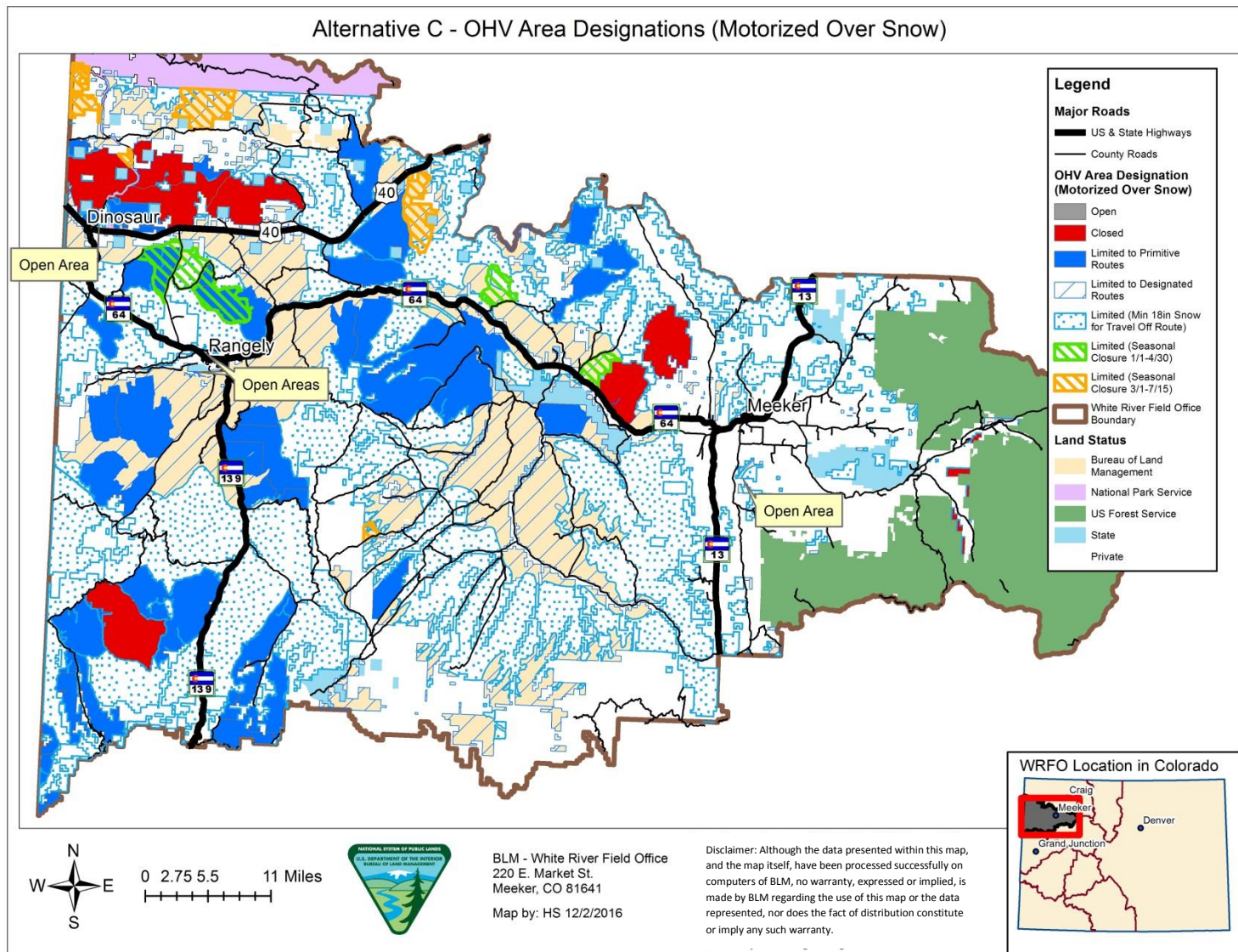
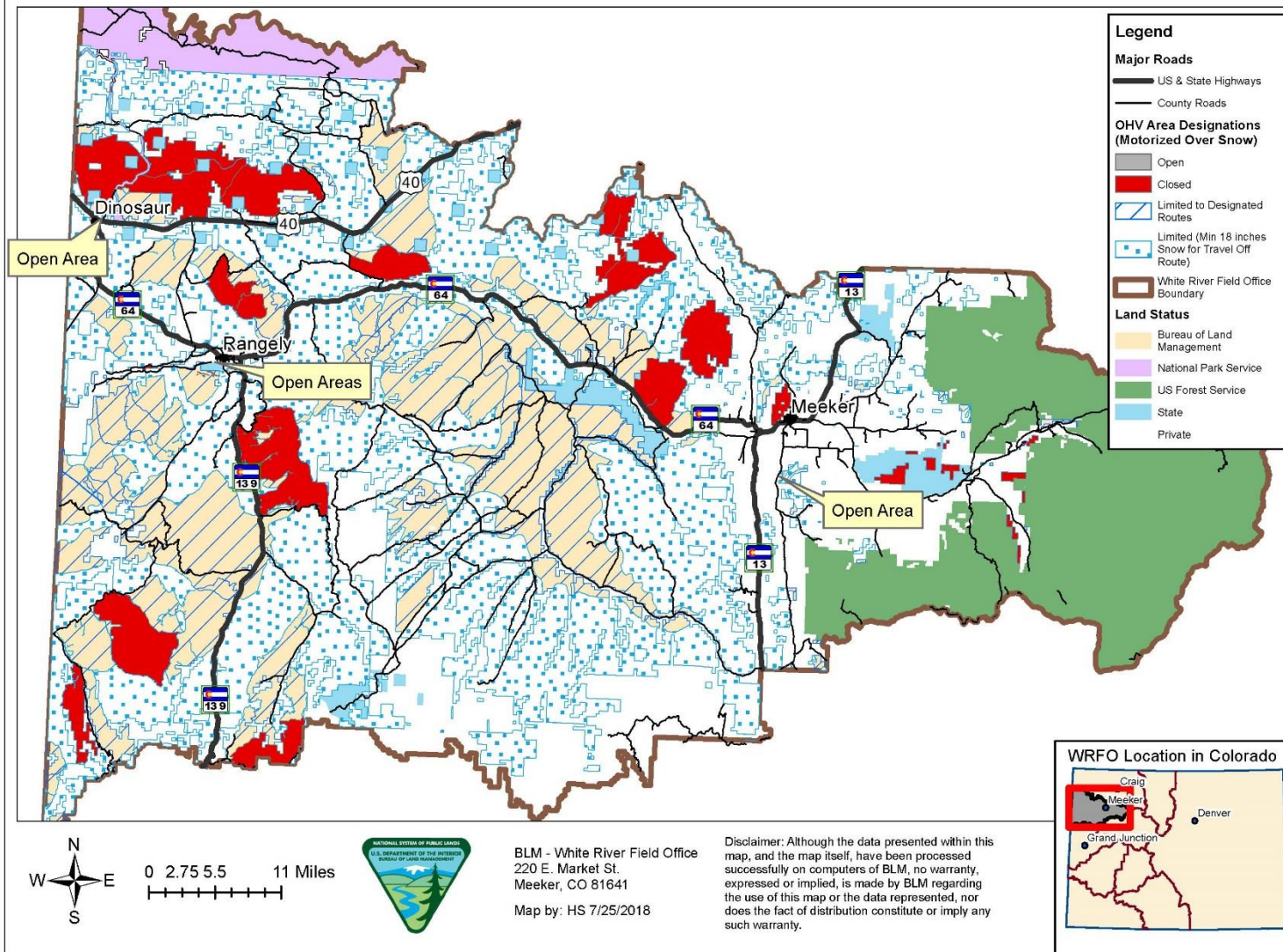


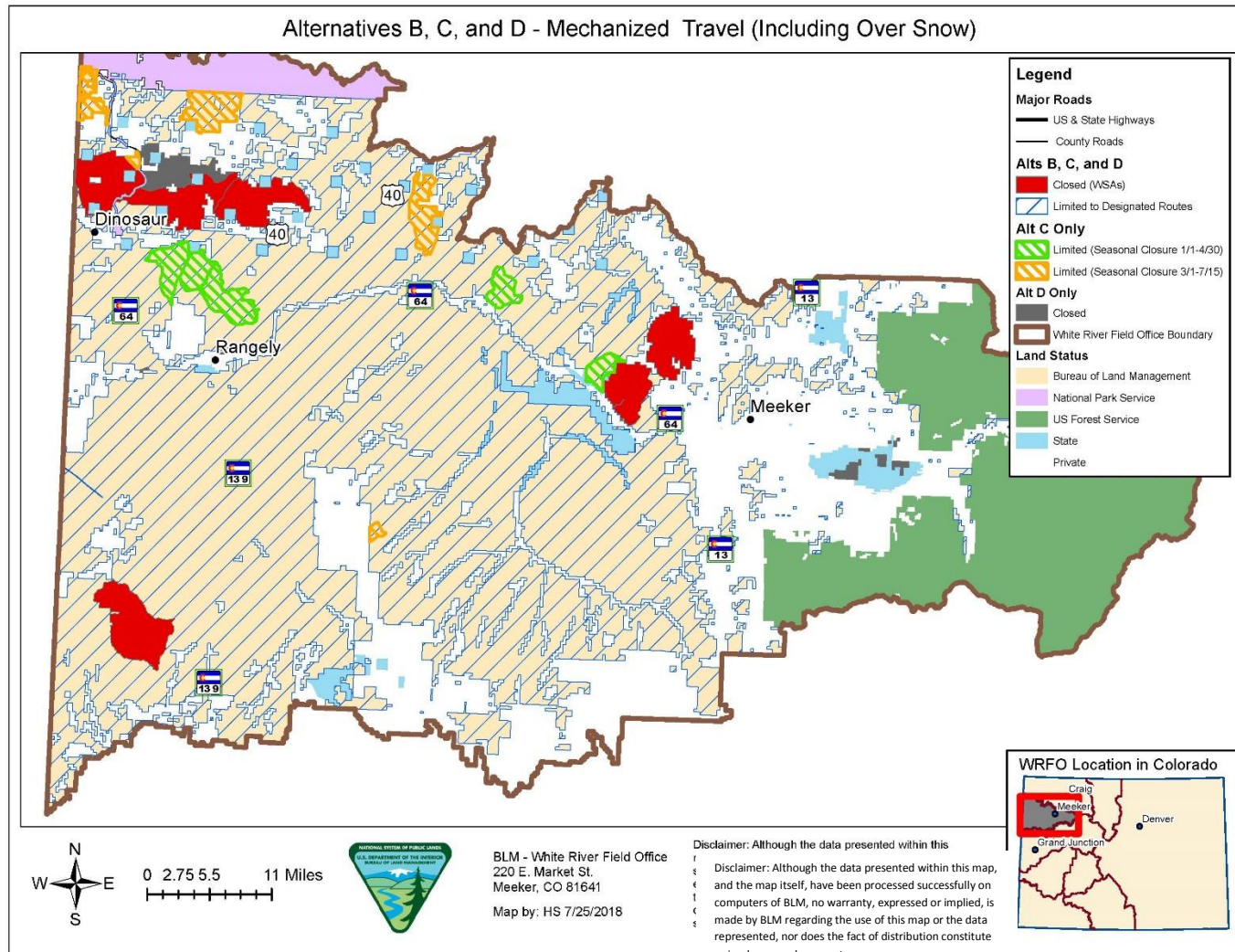
Figure 14. Alternative D – Motorized Over-Snow Travel

Alternative D - OHV Area Designations (Motorized Over Snow)



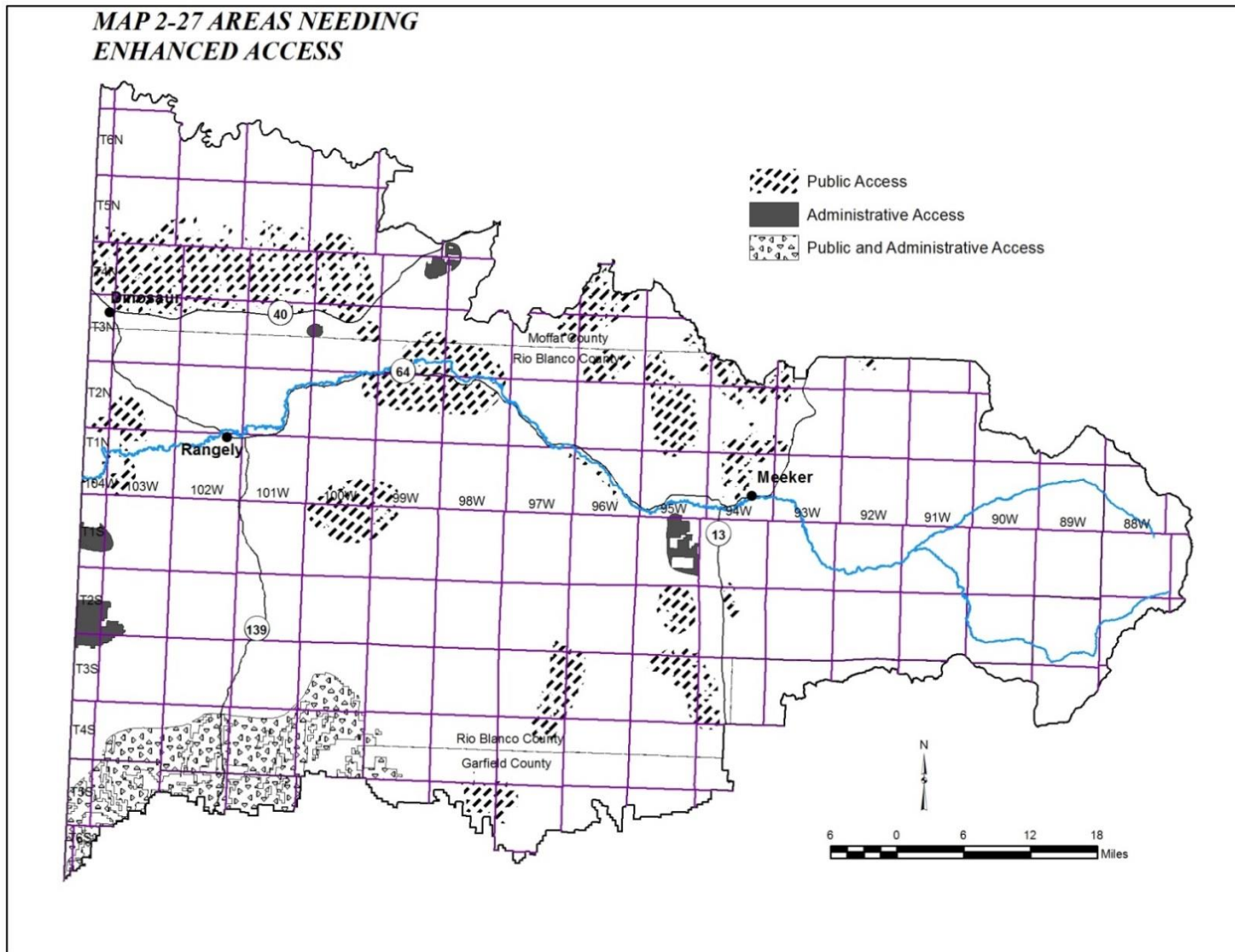
C.2. Mechanized Travel (Including Over Snow)

Figure 15. Alternatives B, C, and D – Mechanized Travel (Including Over Snow)



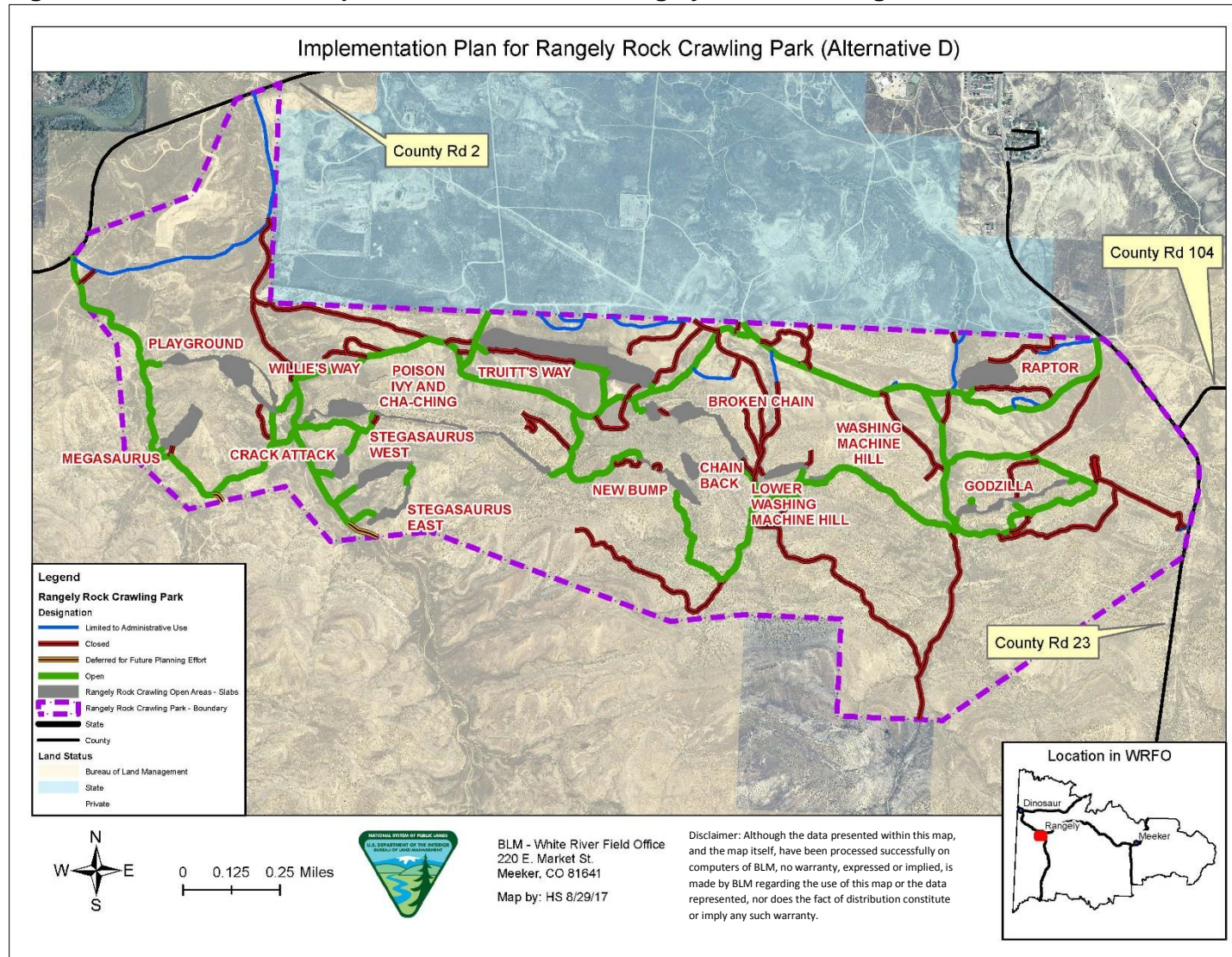
C.3. Areas Needing Improved Public Access

Figure 16. Alternative A – Areas Needing Improved Public Access in the 1997 RMP



C.4. Implementation Plan for Rangely Rock Crawling Park

Figure 17. Alternative D - Implementation Plan for Rangely Rock Crawling Park



C.5. Route Density

Figure 18. Alternative A Route Density Designation Criteria – Big Game Seasonal Ranges

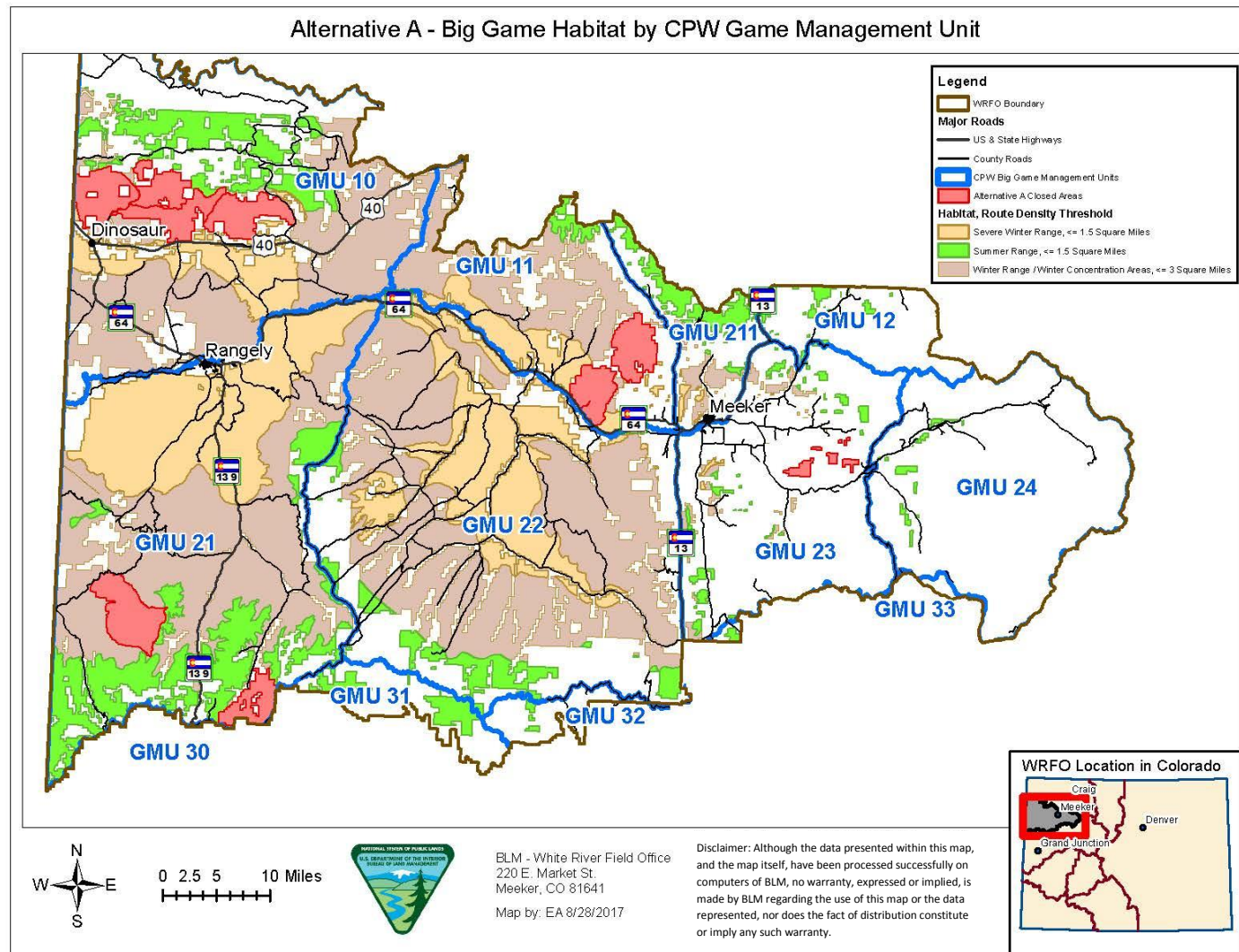


Figure 19. Alternative A Route Density Designation Criteria – Defined Areas

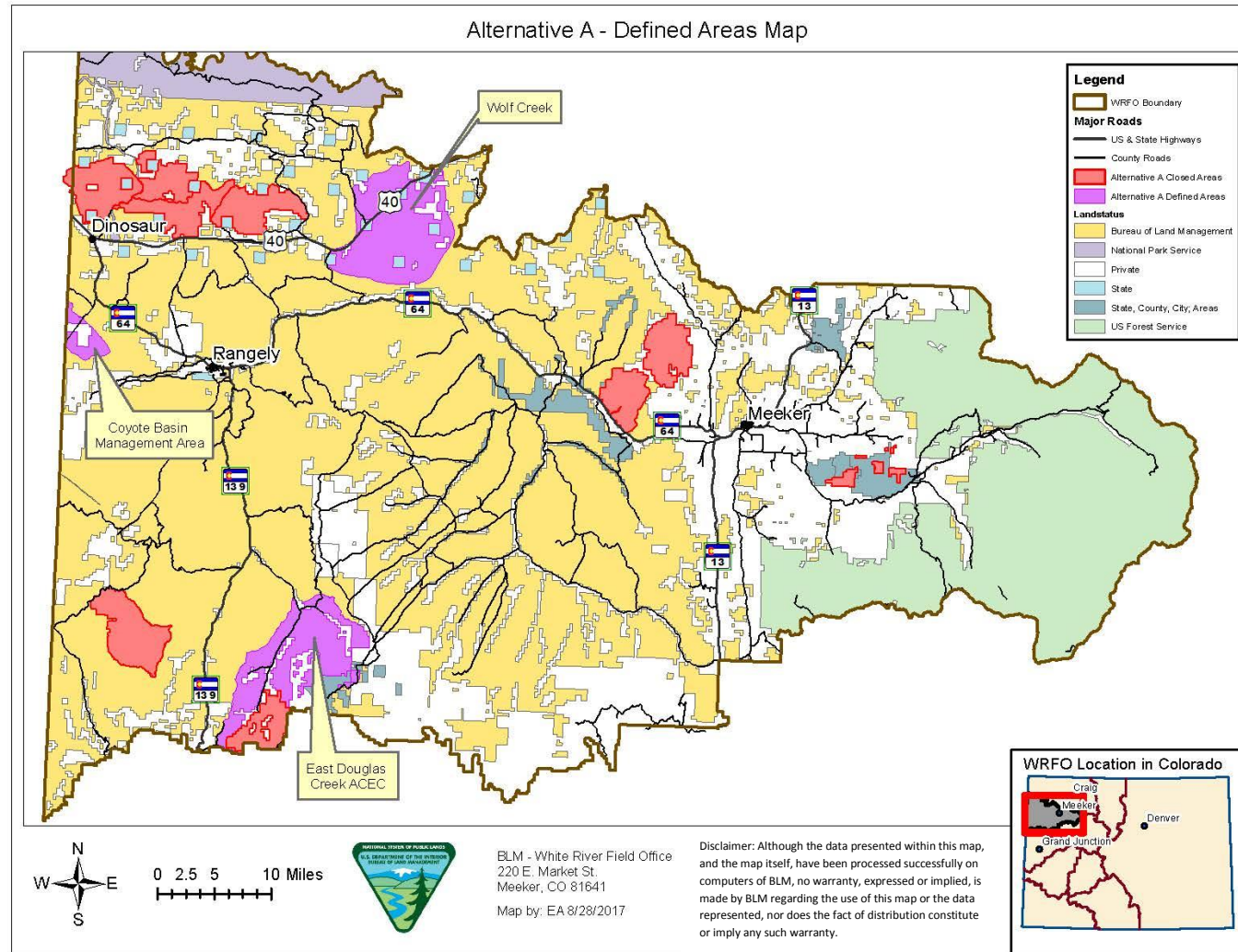


Figure 20. Alternative C Route Density Designation Criteria – Greater Sage-Grouse Habitat and Leks

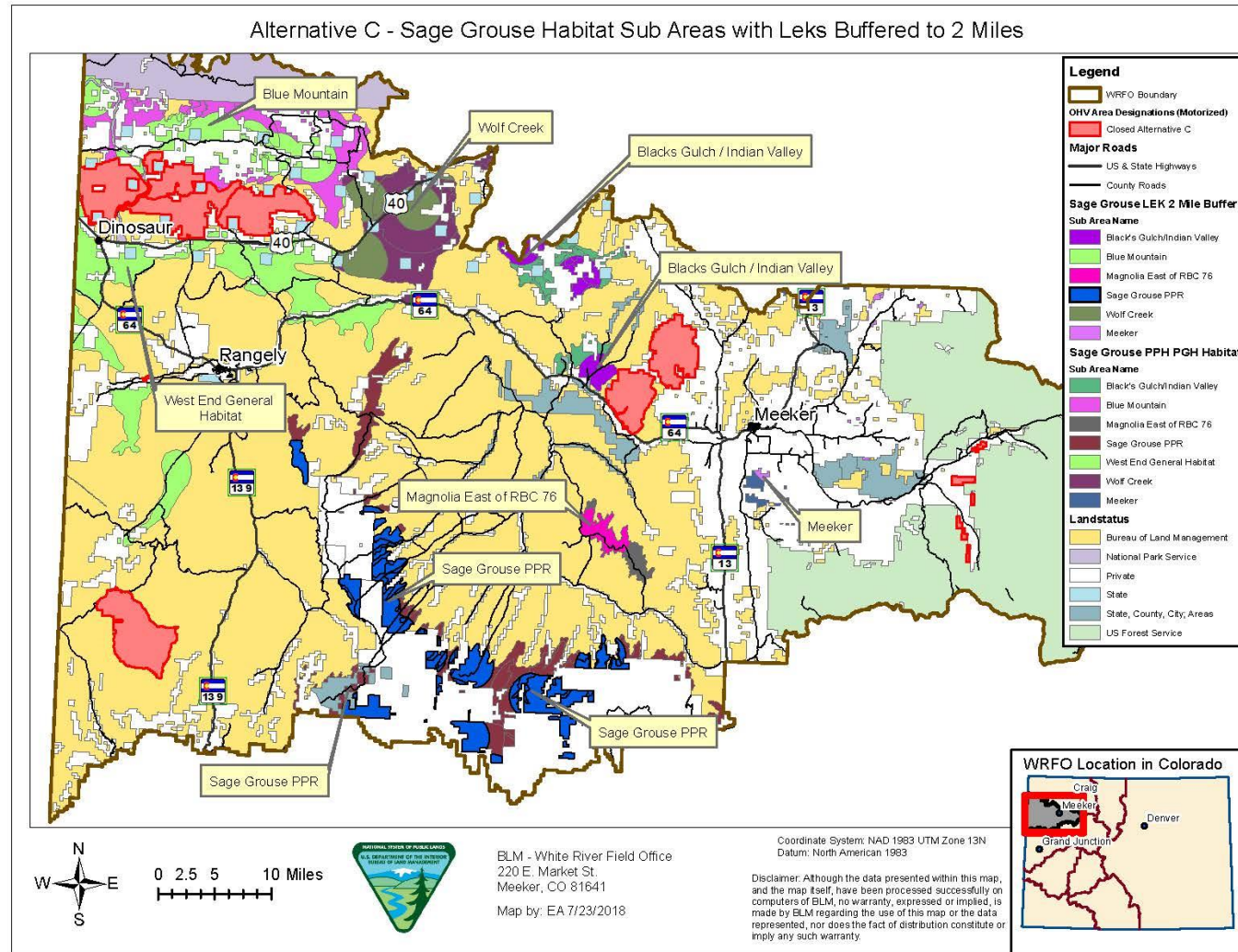


Figure 21. Alternative D Route Density Designation Criteria – Big Game Seasonal Ranges

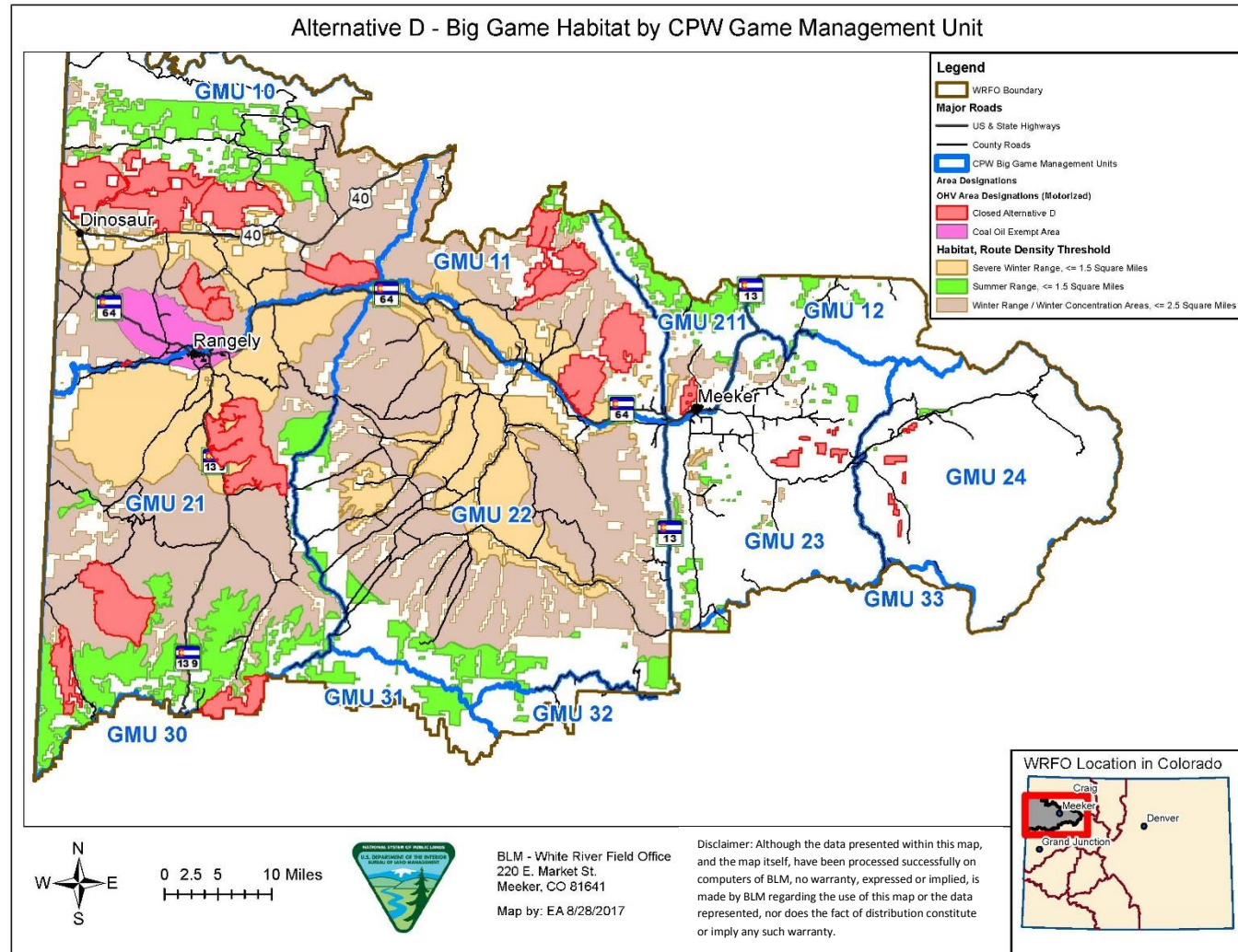
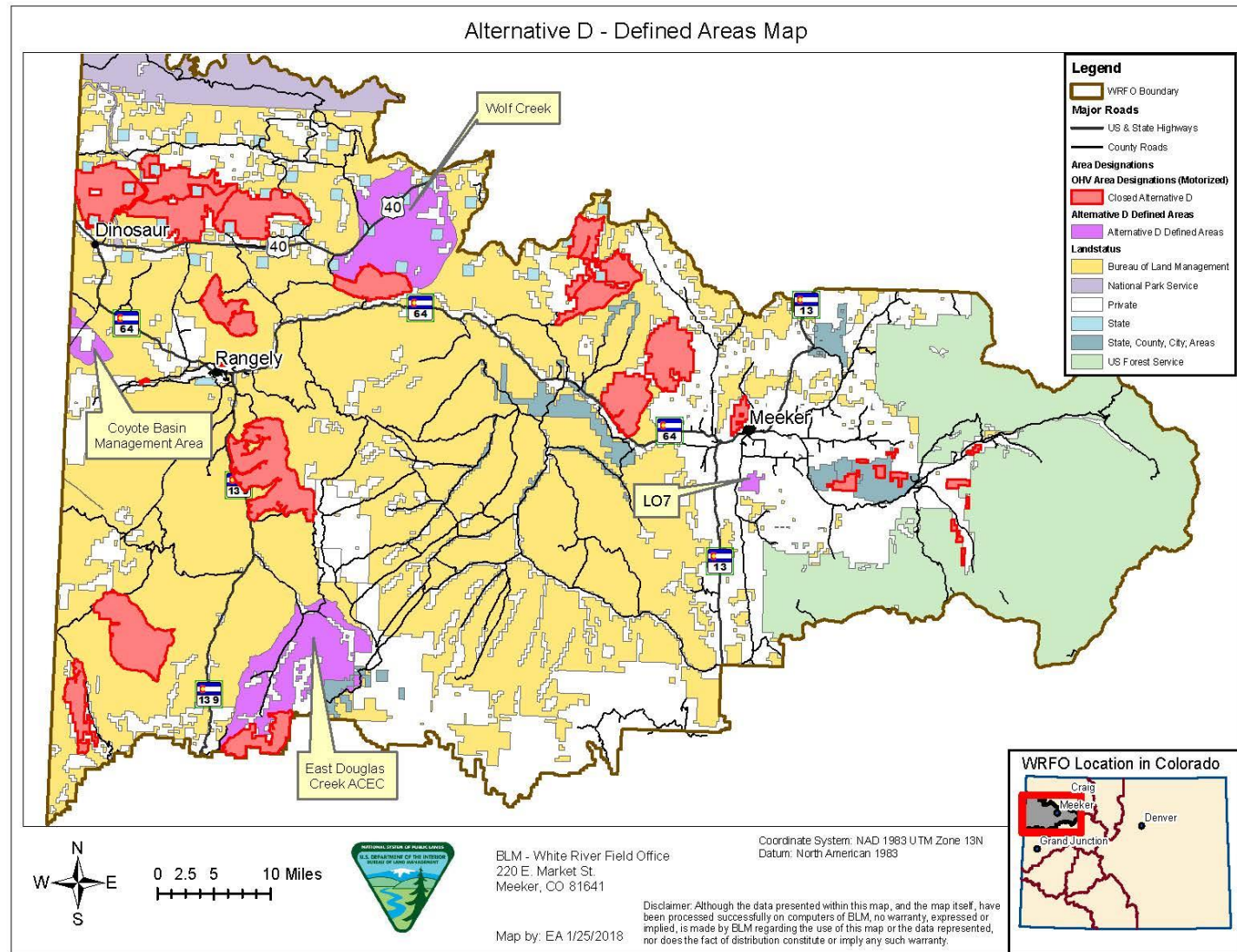


Figure 22. Alternative D Route Density Designation Criteria – Defined Areas



C.6. Lands with Wilderness Characteristics

Figure 23. Big Ridge Lands with Wilderness Characteristics Unit (Alternative D)

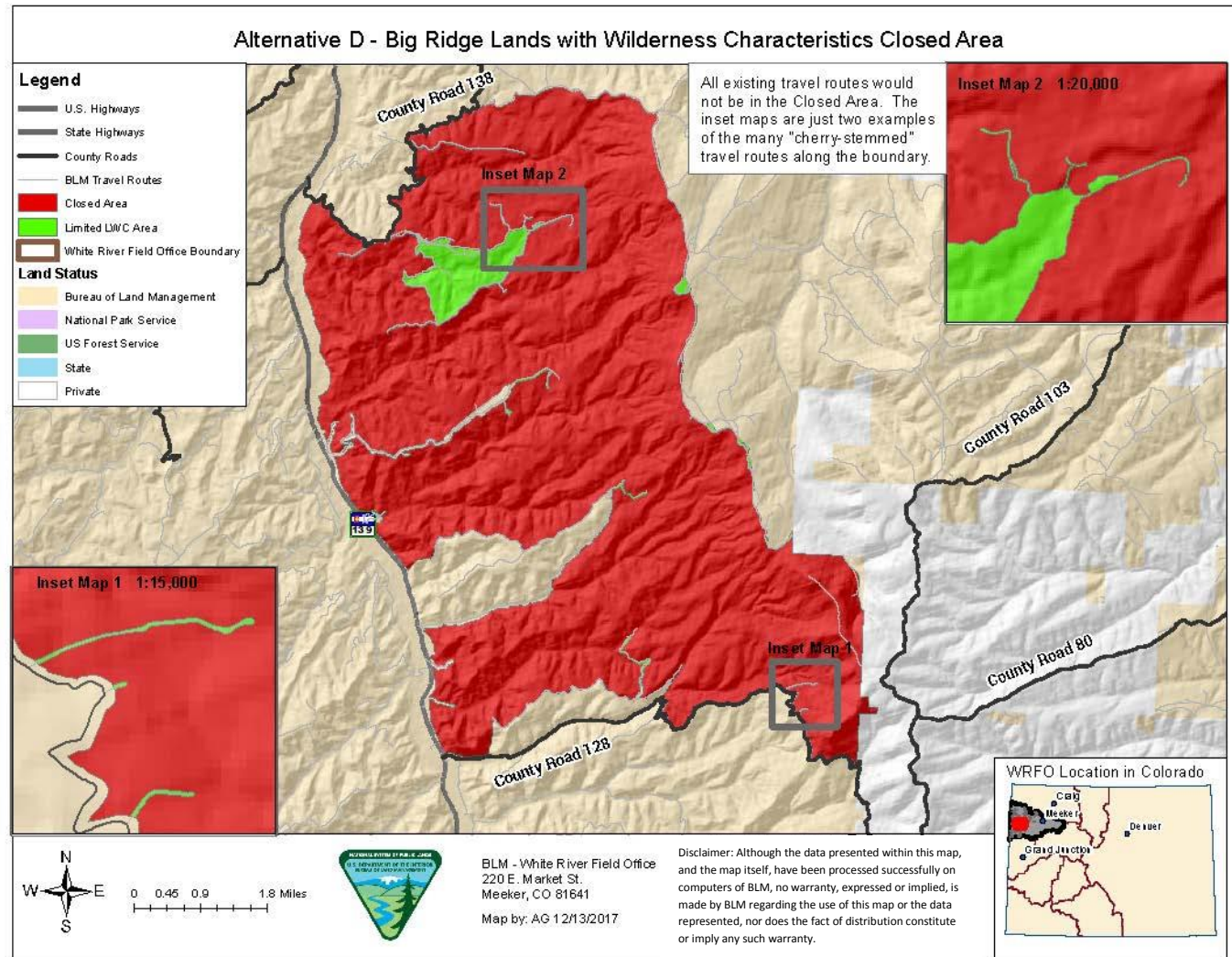


Figure 24. Coal Ridge Lands with Wilderness Characteristics Unit (Alternative D)

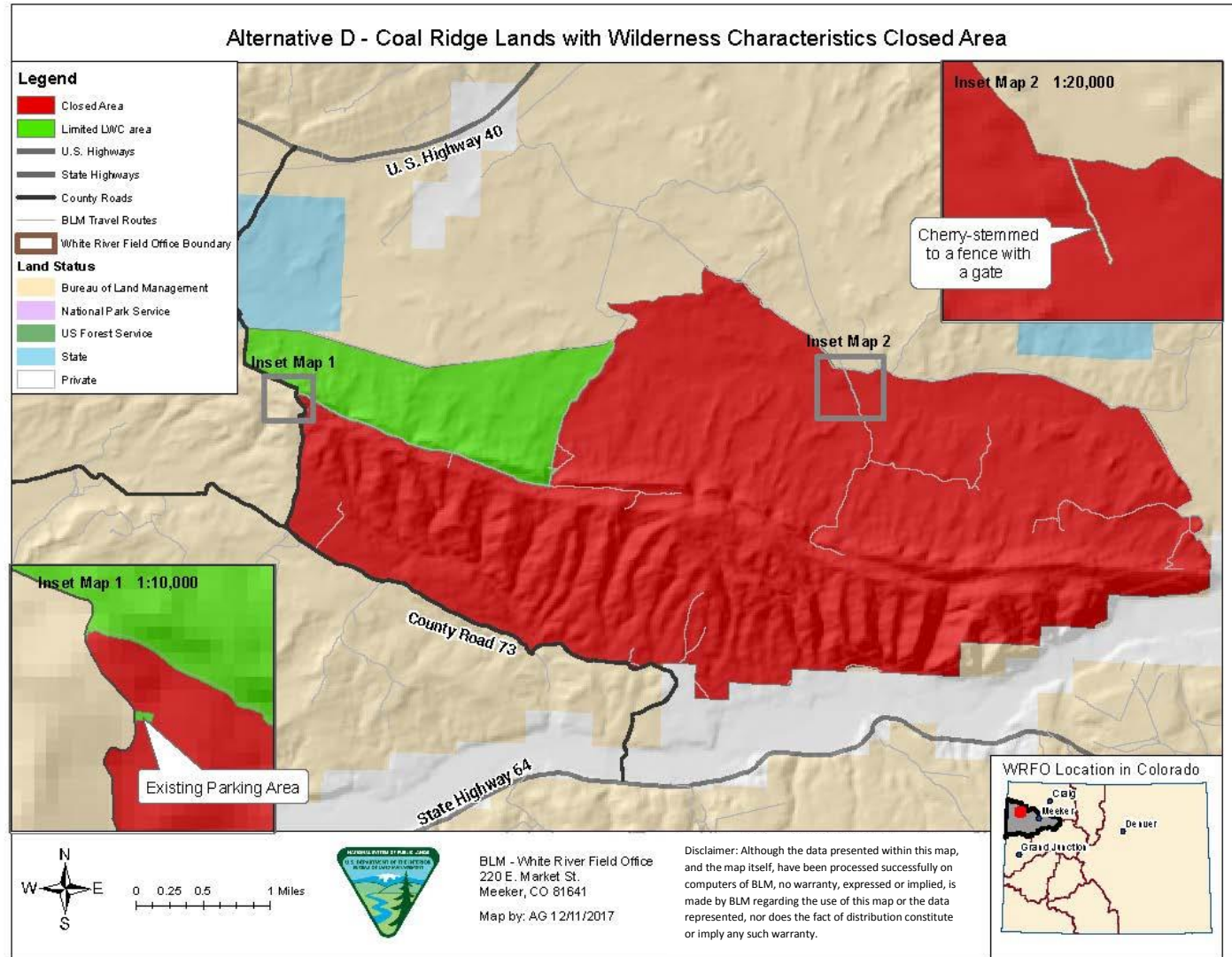


Figure 25. North Colorow Lands with Wilderness Characteristics Unit (Alternative D)

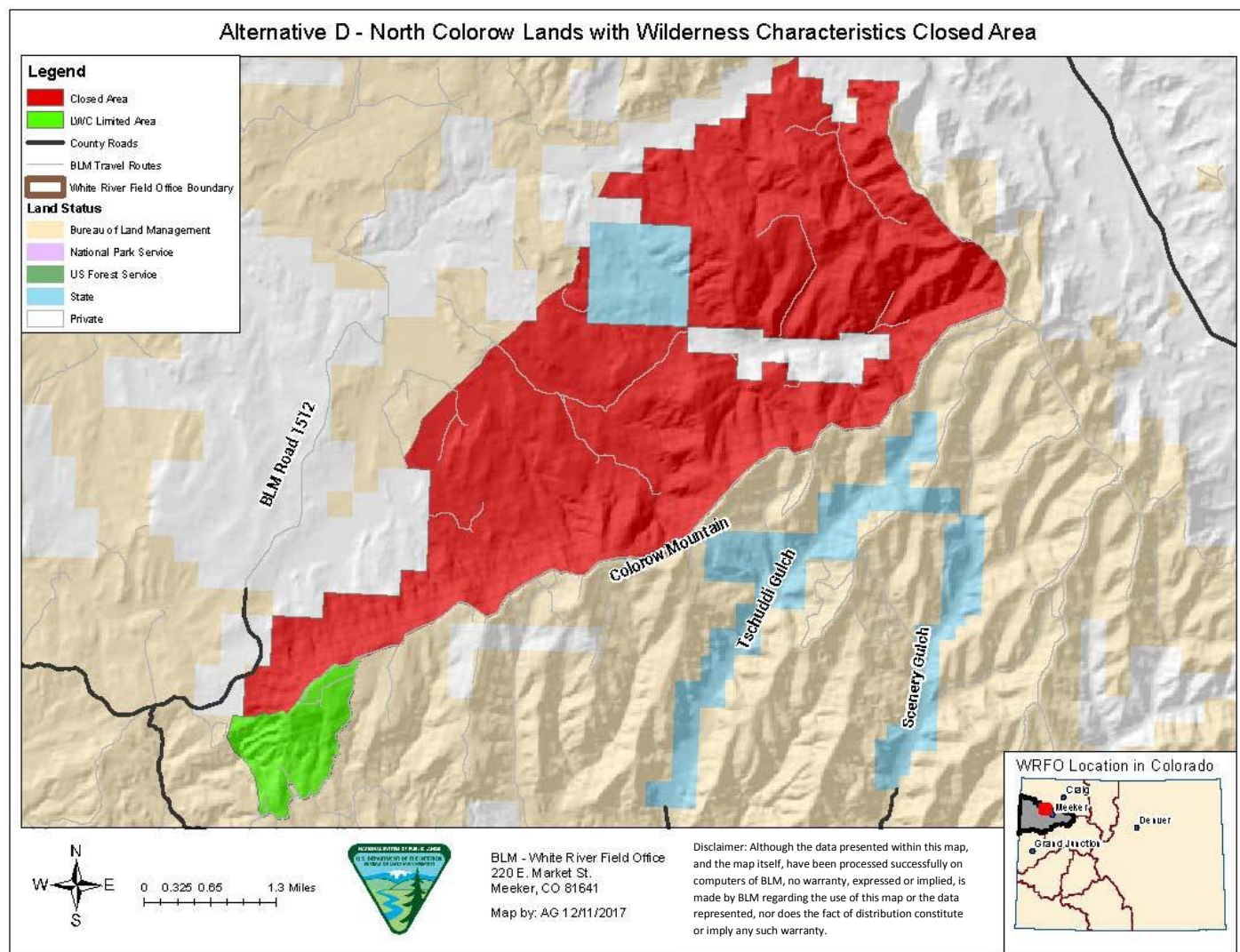


Figure 26. Pike Ridge Lands with Wilderness Characteristics Unit (Alternative D)

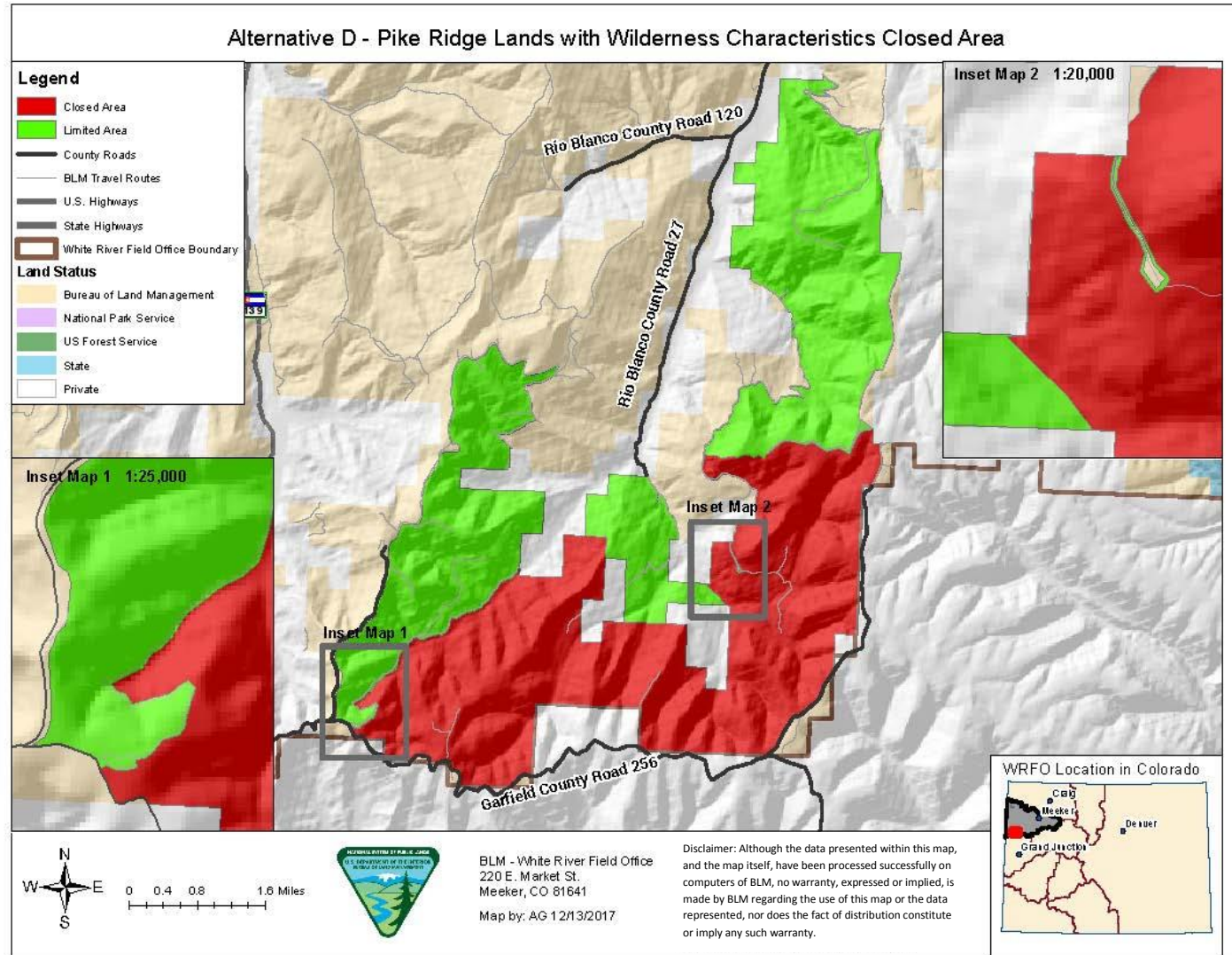


Figure 27. Pinto Gulch Lands with Wilderness Characteristics Unit (Alternative D)

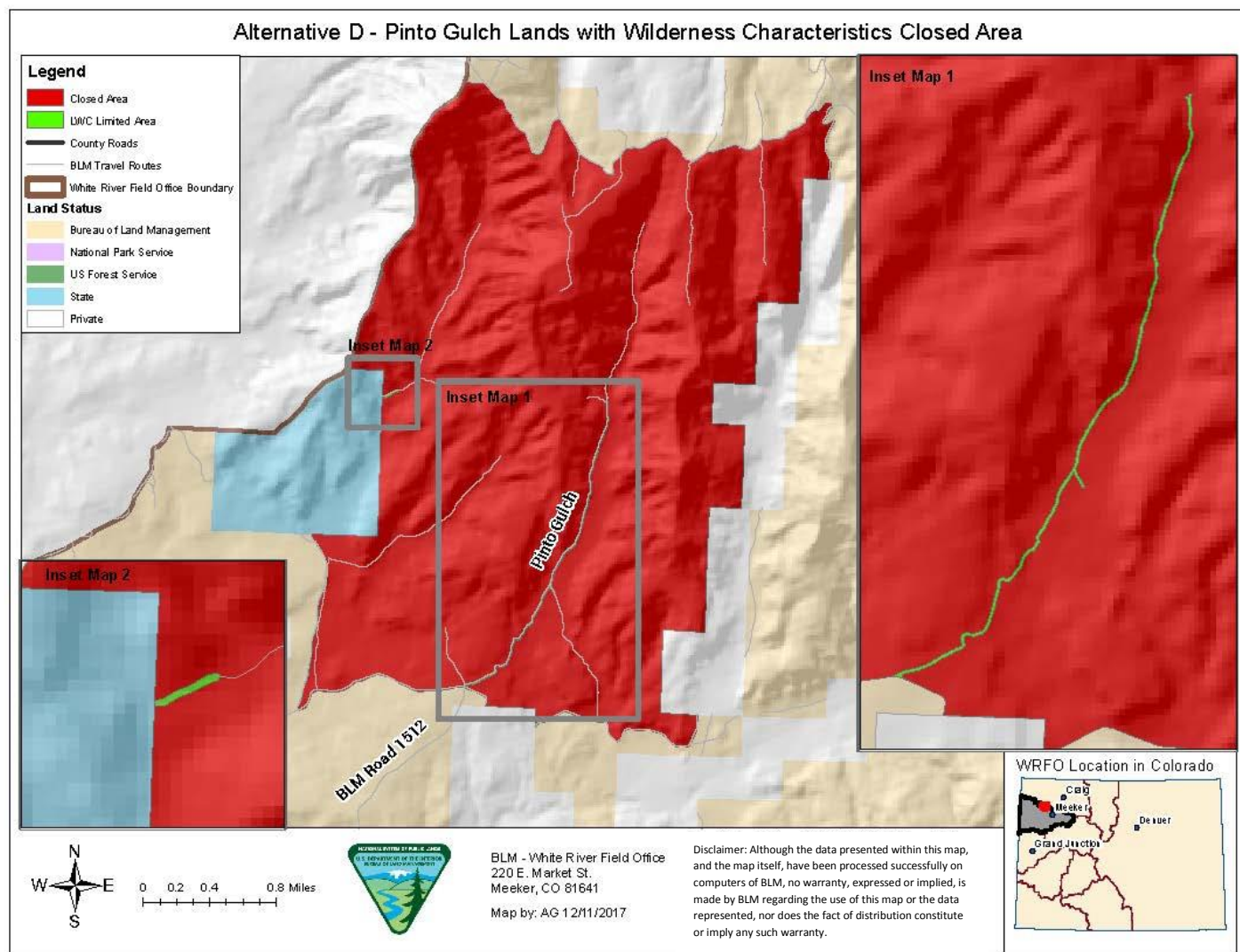


Figure 28. Upper Coal Oil Rim Lands with Wilderness Characteristics Unit (Alternative D)

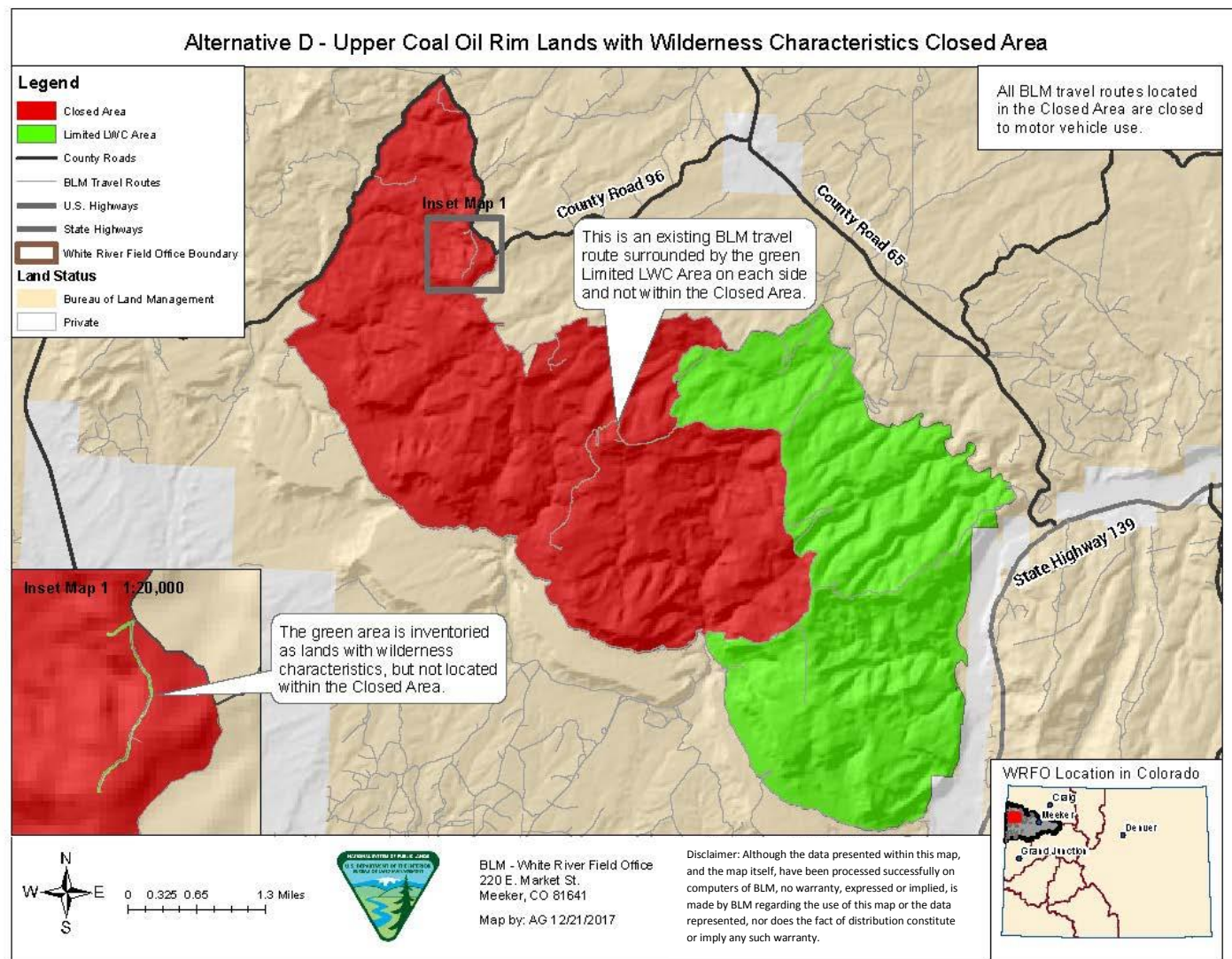
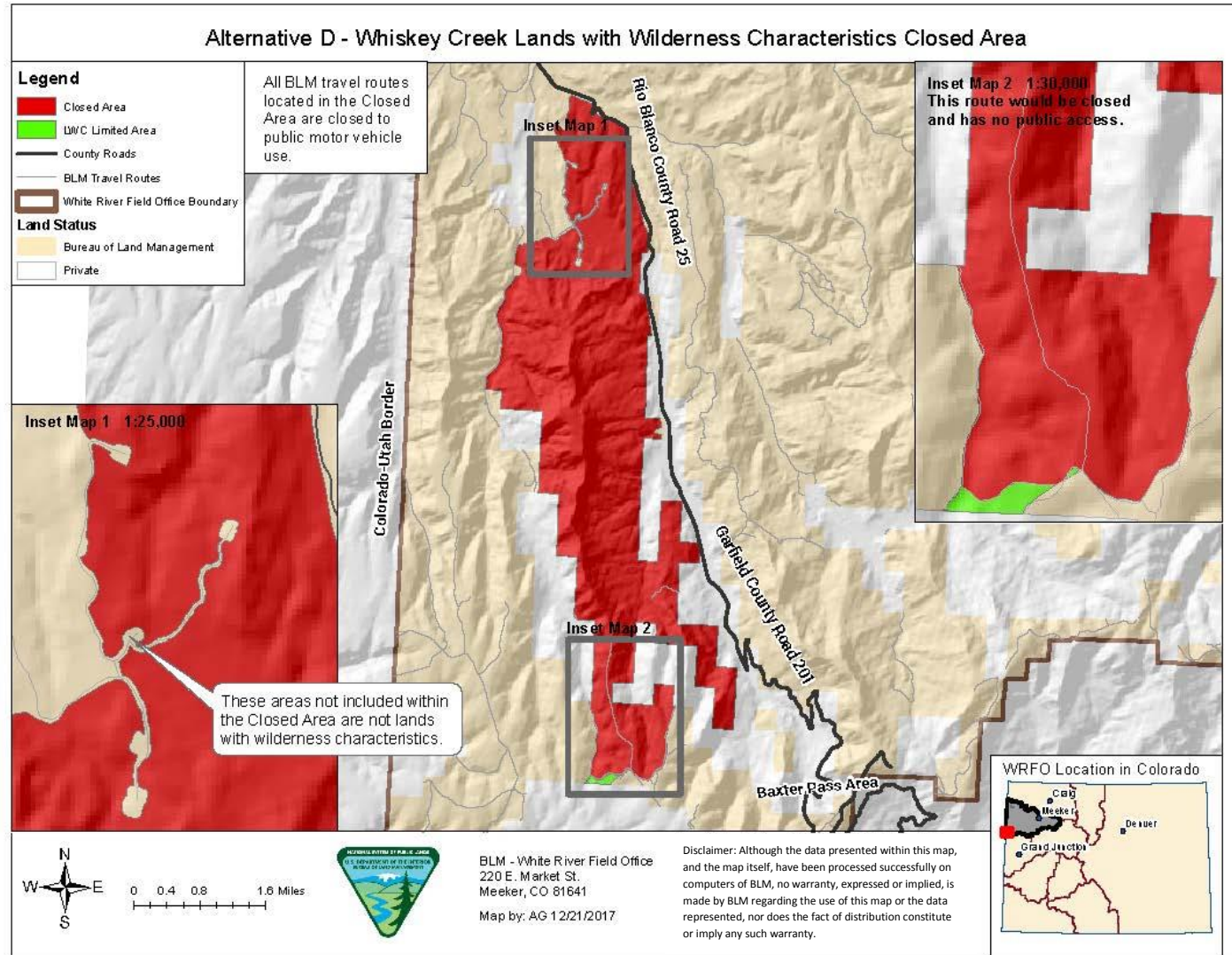


Figure 29. Whiskey Creek Lands with Wilderness Characteristics Unit (Alternative D)



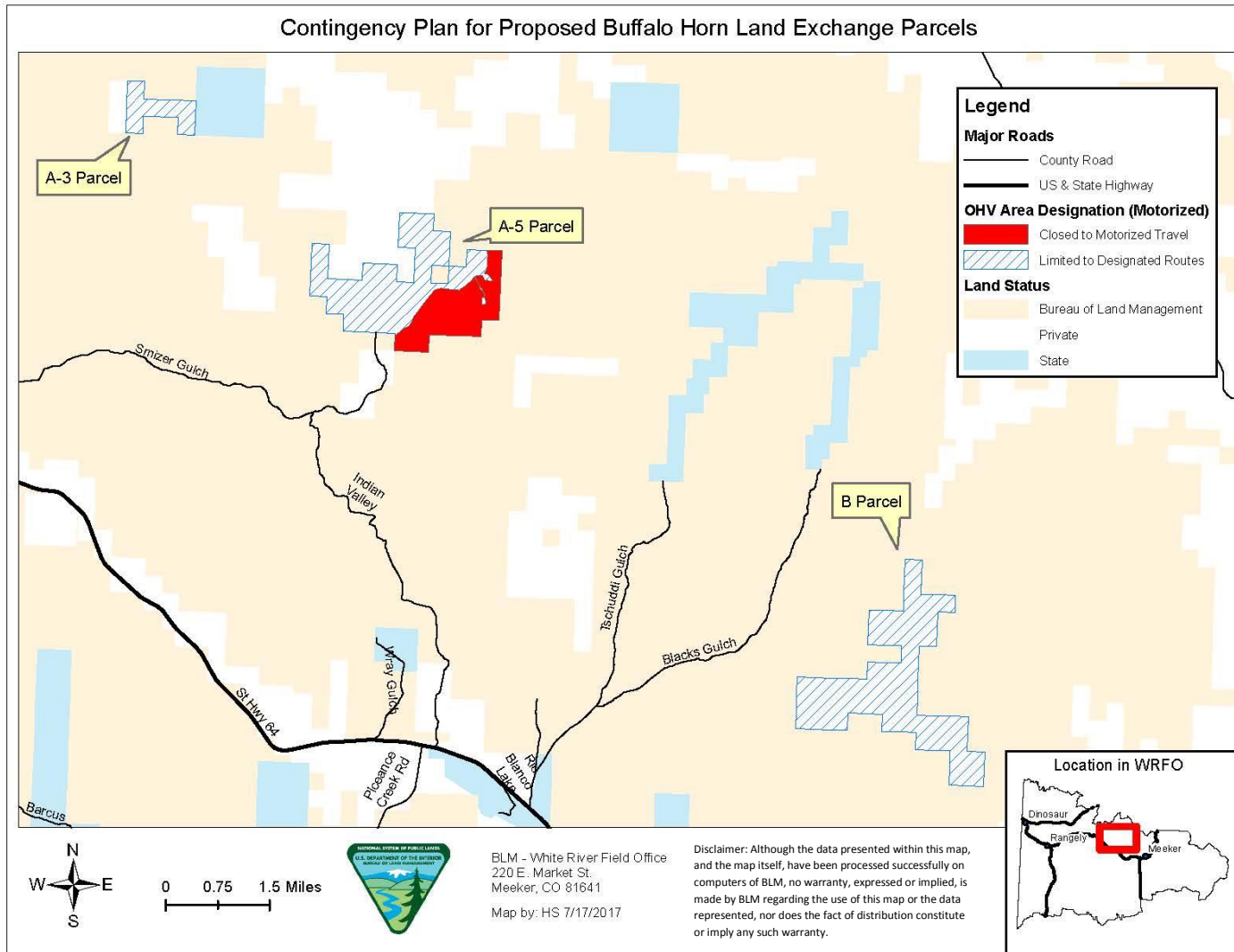
APPENDIX D. CONTINGENCY PLANS FOR BUFFALO HORN LAND EXCHANGE

The BLM published a Notice of Exchange Proposal on December 8, 2016 to announce that the BLM is considering a proposal to exchange lands pursuant to Section 206 of the Federal Land Policy and Management Act of 1976. The proponent of the exchange is Buffalo Horn Properties, LLC. The proposed exchange of surface estates only would convey 16 parcels of Federal lands totaling approximately 3,806 acres in Rio Blanco and Moffat Counties for two non-Federal parcels in Rio Blanco County and one parcel in Moffat County totaling 4,035.77 acres. If the BLM were to acquire the three private parcels in the proposed exchange, they would be managed similar to adjacent land (Table D1 and Figure 30.)

Table D1. Contingency Travel Management Direction for Potential Acquisition Parcels in the Buffalo Horn Land Exchange

Parcel	Motorized Travel	Mechanized Travel	Over Snow Motorized Travel
All of A-3 (280 acres), all of B (1,835), and a portion of A-5 (1,278 acres)	Limited to designated routes	Limited to designated routes	There would be no minimum snow requirements for over-snow motorized travel on designated routes. There must be at least 18 inches of snow cover for over-snow motorized travel off of designated routes.
Portion of A-5 with lands with wilderness characteristics (648 acres)	Closed (to provide consistent management with the adjacent North Colorow lands with wilderness characteristics unit)	Limited to designated routes. No restriction on the use of game carts.	Closed

Figure 30. Contingency Plan for Proposed Buffalo Horn Land Exchange Parcels



Appendix E. Changes to the Alternatives Based on Public Review of the Preliminary Alternatives

The BLM considered public comments on the preliminary alternatives and either 1) modified Alternative B or C to expand the range of alternatives or 2) identified additional alternatives considered but eliminated from detailed analysis. Comments that were already within the range of alternatives, non-substantive comments (such as a simple “vote” for a particular alternative), and comments that were outside the scope of this planning effort were not considered.

E.1. Modifications to Alternatives B or C

- Expand the North Dinosaur open area to north to the water well #4 access road to include more varied terrain (Alt C)
- Expand the LO7 Hill open area to the south to the private property boundary to consider more varied terrain in addition to the sagebrush bench (Alt C)
- Modify the boundary of the Moosehead Mountain closed area to allow access to the trees for summer camping (Alt C)
- Manage the portion of the Big Ridge proposed backcountry conservation area that is outside of the lands with wilderness characteristics area as closed to motorized travel (Alt B)
- Apply seasonal area closures to crucial wildlife habitat areas identified by CPW, such as mule deer migration, stopover, concentration areas, winter ranges, and sage-grouse priority habitat management areas (Alt C)
- Manage Tier 2 and Tier 3 lands with wilderness characteristics as closed to motorized travel (Alt B)
- Manage Tier 2 and Tier 3 lands with wilderness characteristics as limited to primitive routes (Alt C)
- Remove the CPW emphasis areas of Big Ridge, Twin Buttes, and Oil Spring Mountain from the proposed route density limitations since these areas include big game severe winter range and summer range which would be managed at 1.5 mi/mi² (Alt C)
- Update the sage-grouse lek density map to include three additional leks identified by CPW (Alt C)
- Treat county roads the same as State highways when calculating route densities (Alt C)

E.2. Alternatives Considered but Not Carried Forward

- Alternate open area near Dinosaur and Snake John Reef to avoid potential impacts to cultural resources and lands with wilderness characteristics
- Additional open area on LO7 for long range target shooting
- Within the Rangely Rock Crawling Park, extend the open areas at least 100 ft beyond the rock slab edges to provide safe use of these sites
- Identify landlocked parcels and other parcels that are inaccessible and develop strategies for providing access to those lands
- Manage big game migration corridors for a route density of 1 mi/mi²
- Manage big game winter concentration areas for a route density of 1 mi/mi²
- Modify the boundaries of the Coal Oil Basin exempt area to include only the area of intensive development and remove the area overlapping the Coal Oil Gulch lands with wilderness characteristics unit
- Include temporary routes (oil and gas access routes) in the route density calculations since these may be gravel roads that are used for decades
- Include routes that are seasonally closed in the route density calculations
- Combine travel management planning with recreation management planning and consider designation of Special Recreation Management Areas (SRMAs)

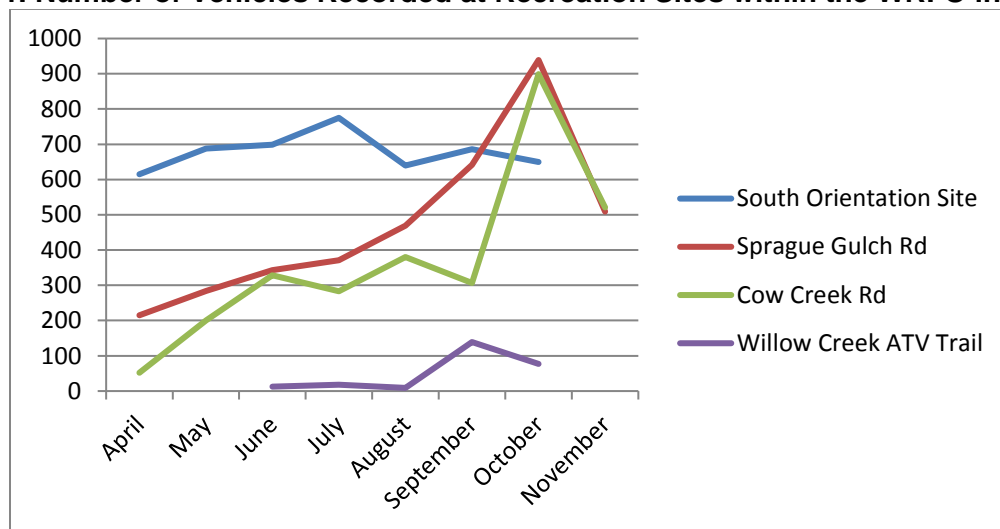
APPENDIX F. ASSUMPTIONS FOR ANALYSIS

F.1. Predominant Public Uses and Seasons of Use

Traffic counter data collected in 2014 was used to develop assumptions about use of the transportation network within the WRFO (Figure 31). Canyon Pintado's South Orientation Site represents typical summer visitation trends to developed recreation sites. Use is generally steady through the spring-fall (April-October) season, with peak visitation in July.

In areas of the field office without developed recreation sites, such as along the Sprague Gulch Road or Cow Creek Road, the use increases substantially in the fall in association with the big game hunting seasons. The Willow Creek ATV trail is a relatively new trail built by the BLM in 2012 and 2013. Use of this trail has doubled in the past two years with a substantial seasonal increase in use in September.

Figure 31. Number of Vehicles Recorded at Recreation Sites within the WRFO in 2014



F.2. Maintenance of Designated and Primitive Routes

The BLM would identify maintenance intensity during implementation travel management planning for each designated route (including roads, primitive roads, and trails). The use of “mechanical means” (use of hand or power machinery or tools) would be permitted for maintaining designated routes. Roads would be maintained for regular and continuous use by low-clearance vehicles. Primitive roads would be maintained for use by four-wheel drive or high-clearance vehicles but may not meet any BLM road design standards. Trails would be maintained for use by human-powered, stock, or off-road vehicles. The BLM would prioritize maintenance of designated routes based on available annual budgets.

In contrast, primitive routes within lands with wilderness characteristics units (Alternative C) would generally not be maintained by mechanical means. However, on a case-by-case basis, the BLM could permit maintenance of primitive routes using mechanical means if it was necessary to facilitate use of the primitive route by permitted users (e.g., livestock grazing permittees needing to maintain a range improvement). Mechanical maintenance of primitive routes should

be limited to the extent necessary to permit access (e.g., repairing a stream crossing) and should not result in a change in the route's status (i.e., becoming a "wilderness inventory road"). A route can be considered a primitive route even though every mile of the route may not meet the criteria regarding mechanical maintenance.

F.3. Access along the Boundaries of Closed Areas

When routes are used to delineate the boundary of a closed area (or seasonal closure area), that route is assumed to be outside of the closed area and available for use by the public (until route-by-route decisions are made during implementation planning).

F.4. Existing Transportation Network

The transportation network within the WRFO consists of an estimated 5,040 miles of BLM routes, county roads, and U.S. and state highways (Table F1). Alternatives B, C, and D would make temporary routes (oil and gas access routes) generally unavailable for public use. It is difficult to determine how many BLM routes are oil and gas access routes since the BLM has not completed route-by-route travel management planning (and some routes that serve as access to oil and gas facilities may be designated as available for public use). As an assumption for analysis, we identified all route segments (from the 2014-2016 WRFO travel route inventories) within 100 meters of an oil and gas facility (well pad, gas plant, etc) as an oil and gas access route.

Table F3. Miles of Routes on BLM Lands in the Planning Area by Game Management Area (GMU)

GMU	BLM Routes (Not Including Oil and Gas Routes) (miles)	BLM Oil and Gas Access Routes ¹ (miles)	Total BLM Routes (miles)	County Roads (miles)	US and State Highways (miles)	Total Routes in the GMU (miles)
10	852	165	1,017	94	26	1,138
11	328	64	391	24	3	418
12	13	0	13	2	0	15
21	729	673	1,402	173	46	1,622
22	1,202	242	1,443	187	9	1,638
23	63	1	64	3	0	67
24	7	0	7	2	0	8
30	5	0	5	2	0	7
31	42	3	45	1	0	47
32	9	0	9	0	0	9
33	1	0	1	0	0	1
211	93	14	107	4	0	110
Total	3,343	1,162	4,505	493	84	5,082

¹ Route segments within 100 meters of an oil and gas facility (such as a well pad).

F.5. Route Density

Route density is simply a measure of how many miles of routes are within a particular area (e.g., square miles of big game seasonal range within a GMU). Route density targets are included as a management action in Alternatives A, C, and D. In contrast to Alternative A, Alternatives C and Alternative D would apply to both mechanized and motorized travel and would not apply within the Coal Oil Basin Exempt Area (Rangely Oil Field).

Route Density Calculation Methods – Current Conditions

- Area Included
 - Only areas (square miles) on BLM-managed surface estate were included in route density calculations.
 - We did not include the area (square miles) in the proposed open areas or the Coal Oil Basin Exempt Area (Rangely Oil Field).
 - Big Game
 - The WRFO used the same big game seasonal range map for travel management decisions as described in the Oil & Gas Development RMPA (Map 2-4) because it eliminates overlap between types of seasonal ranges. (Note: The Oil and Gas RMPA threshold map did not include WSAs since these areas are closed to leasing. We've extrapolated the seasonal ranges for these areas based on current NDIS data and the seasonal range hierarchy described in the Oil and Gas FEIS on page 2-30).
 - Defined Areas
 - These areas (e.g., LO7, East Douglas ACEC, and the ferret management areas) have existing defined spatial boundaries.
 - Sage-Grouse (Alt C Only)
 - Rather than using GMUs, the BLM identified "sub-areas" as the basis for the calculation of available habitat (i.e., Blacks Gulch/Indian Valley, Blue Mountain, Magnolia, Piceance-Parachute-Roan, West End General Habitat, Wolf Creek, and Meeker).
- Routes Included
 - Only routes on BLM-managed surface estate were included in route density calculations.
 - The BLM included all motorized and mechanized routes that are available for public use in the route density calculations (including BLM routes, county roads, and state and local highways).
 - Routes with restricted public access (such as routes designated for administrative access, routes in closed areas, or routes subject to seasonal closure) would typically not be included in the route density calculations.
 - Routes within WSAs were not included since these routes are closed to both motorized and mechanized travel.
 - In the RMPA, the BLM calculated route density including all routes (including oil and gas routes). At this stage in the planning process, the BLM has not made route-by-route designations and it is therefore unknown how many of these routes would be limited to administrative use, seasonally limited, or closed during future travel management plans.

Thus the estimates in the RMPA are conservative in that they estimate the greatest potential route density and greatest potential impact to wildlife.

- In future TMPs, the BLM would know the proposed route designations for each route in each alternative prior to conducting impacts analysis. In analyzing these future TMPs, the BLM would not include routes that were proposed to be designated as limited to administrative use, seasonally limited, or closed. Some oil and gas routes may be designated as open to the public but many are likely to be limited to administrative use and designated as “temporary routes”. While these “temporary routes” may be in use for years, they would not be included in route density estimates because 1) they would not be considered part of the public transportation system and would be reclaimed when the well pad was reclaimed and 2) their use by industry would be managed by either seasonal timing limitations or the threshold concept in the Oil and Gas RMPA.

Route Density Calculation Methods – Potential Future Conditions (RMPA Only)

- In areas with overlapping route density objectives (for example, big game winter range within the Wolf Creek Ferret Management Area), the most restrictive route density would apply. To estimate potential future conditions (if route density was fully implemented), we estimated route densities after accounting for this type of overlap between proposed management actions.
- Route density goals for big game seasonal ranges were applied to remaining habitats outside Defined Management Areas on the base of the overall seasonal range within a GMU (i.e., Alternative A and D) or across GMU seasonal range expressly managed for vehicle use (e.g., limited areas as in Alternative C). Depending on coincident wildlife values served on big game range, route densities on seasonal ranges outside of Defined Management Areas generally equal or exceed prescribed values, while satisfying overall density goals across the GMU’s seasonal range.

Route densities prescribed for each Defined Management Area are assigned in proportion to seasonal range composition in a GMU. The route density for seasonal range outside the GMU’s Defined Management Areas is calculated by solving for the average route density prescribed for that seasonal range.

For example:

GMU Summer Range:

25% Closed Area @ 0 mi/mi²

25% Ferret Management Area @ 1.5 mi/mi²

50% Summer Range (outside Defined Management Areas) @ “?” mi/mi²

Calculating Overall Route Density across the entire GMU Summer Range (Current Alternatives A, B, and D):

$$(0.25 \times 0 \text{ mi/mi}^2) + (0.25 \times 1.5 \text{ mi/mi}^2) + (0.5 \times ? \text{ mi/mi}^2) = 1.5 \text{ mi/mi}^2$$

$$0 + 0.375 + 0.5x = 1.5$$

$$0.5x = 1.125$$

$$X = 2.25 \text{ mi/mi}^2$$

Therefore, route density of 2.25 mi/mi² across 50% of GMU summer range (outside Defined Management Areas) satisfies average route density of 1.5 mi/mi² across GMU Summer Range.

Application and calculation of route density made on the basis of an entire GMU seasonal range (which includes Closed Areas) increases route allowance within a GMU seasonal range proportional to the area closed and Defined Management Areas with more restrictive route density prescriptions. Extraneous route mileage attributed to closed and more restrictive area acreage is then transferred/added to lands authorized for vehicle use to achieve prescribed overall route density. Elevated route density goals applied to areas outside Defined Management Areas under this protocol are counterproductive to wildlife benefits derived from areas closed and assigned more restrictive route densities.

Calculating Average Route Density across GMU Summer Range (Alternative C) using example above:

Summer Range route density outside Defined Management Areas is calculated and applied only to lands managed for vehicle use. This protocol recognizes and credits closed and more restrictive density areas as contributing to reduced road density effects on wildlife.

$$\begin{aligned} (0.33 \times 1.5 \text{ mi/mi}^2) + (0.67 \times ? \text{ mi/mi}^2) &= 1.5 \text{ mi/mi}^2 \\ .495 + 0.67x &= 1.5 \\ 0.67x &= 1.005 \\ X &= 1.5 \text{ mi/mi}^2 \end{aligned}$$

Therefore, 1.5 mi/mi² across remaining 67% of GMU summer range (outside Defined Management Areas) satisfies average route density of 1.5 mi/mi² across GMU Summer Range.

Applying calculated route density on summer range outside Defined Management Areas to determine overall GMU route density:

$$\begin{aligned} (0.25 \times 0 \text{ mi/mi}^2) + (0.25 \times 1.5 \text{ mi/mi}^2) + (0.5 \times 1.5 \text{ mi/mi}^2) &= ? \text{ mi/mi}^2 \\ 0 + 0.375 + 0.75 &= 1.125 \text{ mi/mi}^2 \end{aligned}$$

Therefore, overall summer range route density is 1.125 mi/mi² across the GMU summer range.

F.5.1. Route Density for Big Game Seasonal Ranges

Table F4. Route Densities by Big Game Seasonal Range and GMU – Current Conditions

GMU	Summer Range			Severe Winter Range			General Winter Range and Winter Concentration Areas		
	Area ¹ (mi ²)	Existing Miles of Routes ²	Current Route Density (mi/mi ²)	Area (mi ²)	Existing Miles of Routes ²	Current Route Density (mi/mi ²)	Area (mi ²)	Existing Miles of Routes ²	Current Route Density (mi/mi ²)
10	142	201	1.4	75	229	3.1	239	511	2.1
11	9	20	2.3	64	143	2.3	144	239	1.7
21	156	284	1.8	224	535	2.4	388	764	2.0
22	49	136	2.8	315	795	2.5	330	708	2.1

¹Area does not include open areas or the Coal Oil Basin Exempt Area (Rangely Oil Field).

²Existing miles of routes includes all routes on BLM-managed surface except for any routes within WSAs.

Table F5. Potential Route Density within General Winter Range and Winter Concentration Areas (Alternative A)

GMU	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)
10	169	70	3.0
11	115	29	3.0
21	330	58	3.0
22	330	0	3.0

¹In Alternative A, general winter range and winter concentration areas are proposed to be managed at 3.0 mi/mi².

²Portions of general winter range and winter concentration areas overlap with defined areas which are proposed to be managed at 1.5 mi/mi².

³Potential overall route density for general winter range and winter concentration areas if Alternative A were fully implemented (after accounting for overlap with more restrictive management).

Table F6. Potential Route Density within Big Game Seasonal Ranges (Alternative C)

GMU	Summer Range			Severe Winter Range			General Winter Range and Winter Concentration Areas		
	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)
10	11	131	1.5	15	60	1.5	112	127	2.5
11	8.9	0.1	1.5	32.5	31.5	1.5	91	53	2.5
21	105	51	1.5	193	31	1.5	318	70	2.5
22	10.5	58.5	1.5	282	23	1.5	278	52	2.5

¹In Alternative C, summer range and severe winter range are proposed to be managed at 1.5 mi/mi² and general winter range and winter concentration areas are proposed to be managed at 2.5 mi/mi².

²Portions of big game seasonal ranges overlap with areas of more restrictive management (e.g., defined areas and sage-grouse priority and general habitat management areas at 1.5 mi/mi² and LO7 Hill and areas within 2 miles of a lek at 1.0 mi/mi²). Alternative C also includes proposed seasonal closure areas. Since seasonally limited routes would not be included in route density calculations, these areas would have an effective route density of zero mi/mi².

³Potential overall route density for big game seasonal ranges if Alternative A were fully implemented (after accounting for overlap with more restrictive management).

Table F7. Potential Route Density within General Winter Range and Winter Concentration Areas (Alternative D)

GMU	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)
10	169	70	2.5
11	115	29	2.5
21	330	58	2.5
22	330	0	2.5

¹In Alternative D, general winter range and winter concentration areas are proposed to be managed at 2.5 mi/mi².

²Portions of general winter range and winter concentration areas overlap with [IDENTIFY DEFINED AREAS] which are proposed to be managed at 1.5 mi/mi².

³Potential overall route density for general winter range and winter concentration areas if Alternative D were fully implemented (after accounting for overlap with more restrictive management).

F.5.2. Route Density for Defined Areas

Table F8. Route Densities for Defined Areas – Current Conditions

Defined Area	Area ¹ (mi ²)	Existing Miles of Routes ²	Current Route Density (mi/mi ²)
LO7	2.5	14	5.8
Coyote Basin	8	21	2.7
Wolf Creek	70	130	1.9
East Douglas Creek	74	117	1.6

¹Area does not include open areas or the Coal Oil Basin Exempt Area (Rangely Oil Field).

²Existing miles of routes includes all routes on BLM-managed surface except for any routes within WSAs.

Table F9. Potential Route Density within Defined Areas (Alternative C)

Defined Area	Area Managed at Default Defined Area Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)
Wolf Creek	36.2	33.8	1.1
Coyote Basin	7.57	0	1.5
East Douglas Creek	74	0	1.5

¹In Alternative C, Wolf Creek is proposed to be managed at 1.5 mi/mi².

²Portions of Wolf Creek are within 2 miles of a sage-grouse lek which are proposed to be managed at 1.0 mi/mi².

³Potential overall route density for Wolf Creek if Alternative C were fully implemented (after accounting for overlap with more restrictive management).

F.5.3. Route Density for Greater Sage-Grouse Habitat

Table F10. Route Densities in Greater Sage-Grouse Habitat – Current Conditions

Greater Sage-Grouse Sub-Area	Within 2 miles of Lek			Within Priority and General Habitat		
	Area ¹ (mi ²)	Existing Miles of Routes ²	Current Route Density (mi/mi ²)	Area (mi ²)	Existing Miles of Routes ²	Current Route Density (mi/mi ²)
Blacks Gulch/Indian Valley	16	38	2.3	16	40	2.5
Blue Mountain	41	87	2.1	61	131	2.2
Magnolia	9	27	2.9	6	14	2.4
Piceance-Parachute-Roan	74	206	2.8	57	155	2.7
West End General Habitat	0	0	0	104	320	3.1
Wolf Creek	30	51	1.7	42	81	1.9
Meeker	2	5	2.3	4	22	5.5

¹Area does not include open areas or the Coal Oil Basin Exempt Area (Rangely Oil Field).

²Existing miles of routes includes all routes on BLM-managed surface except for any routes within WSAs.

Table F11. Route Densities in Greater Sage-Grouse Habitat – Potential Route Density if Alternative A was Fully Implemented in Big Game Seasonal Ranges and in Defined Areas

Greater Sage-Grouse Sub-Area	Within 2 miles of Lek			Within Priority and General Habitat		
	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)
Blacks Gulch/ Indian Valley	16.1	0	3.0	15.9	0	3.1
Blue Mountain	40.3	.19	2.5	56.2	4.5	2.5
Magnolia	9.3	0	2.6	5.9	0	2.9
Piceance- Parachute-Roan	74.3	0	1.9	57	0	2.2
West End General Habitat	0	0	0	97.8	5.9	1.8
Wolf Creek	2.3	28	1.6	4.7	37.4	1.7
Meeker	2.1	0	2.0	4.0	0	2.1

¹In Alternative A, big game severe winter range and summer range are proposed to be managed at 1.5 mi/mi² and general winter range and winter concentration areas are proposed to be managed at 3.0 mi/mi².

²Portions of general winter range and winter concentration areas overlap with defined areas which are proposed to be managed at 1.5 mi/mi².

³Potential overall route density in sage-grouse habitats if Alternative A were fully implemented for big game seasonal ranges and defined areas.

Table F12. Potential Overall Route Densities in Greater Sage-Grouse Habitat – Alternative C

Greater Sage-Grouse Sub-Area	Amount of Priority and General Habitat ¹ (mi ²)	Area within 2 miles of Lek ² (mi ²)	Area of Overlap with More Restrictive Management ³ (mi ²)	Potential Overall Route Density ⁴ (mi/mi ²)
Blacks Gulch/ Indian Valley	15.9	16.1	0	1.3
Blue Mountain	52.7	28.1	19.8	1.1
Magnolia	5.9	9.3	0	1.2
Piceance- Parachute-Roan	57	73.1	1.2	1.2
West End General Habitat	104.1	0	0	1.5
Wolf Creek	36.2	24.8	11.3	1.1
Meeker	3.9	2.1	0	1.3

¹In Alternative C, sage-grouse general and priority habitat are proposed to be managed at 1.5 mi/mi².

²Within sage-grouse general and priority habitat, areas within 2 miles of a lek would be managed at 1.0mi/mi².

³Alternative C also includes proposed seasonal closure areas. Since seasonally limited routes would not be included in route density calculations, these areas would have an effective route density of zero mi/mi².

⁴ Potential overall route density in sage-grouse sub-areas if Alternative C were fully implemented.

Table F13. Route Densities in Greater Sage-Grouse Habitat – Potential Route Density if Alternative D was Fully Implemented in Big Game Seasonal Ranges and in Defined Areas

Greater Sage-Grouse Sub-Area	Within 2 miles of Lek			Within Priority and General Habitat		
	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)	Area Managed at Default Big Game Route Density ¹ (mi ²)	Area of Overlap with More Restrictive Management ² (mi ²)	Potential Overall Route Density ³ (mi/mi ²)
Blacks Gulch/Indian Valley	16.1	0	2.5	15.9	0	2.6
Blue Mountain	38	2.89	2.7	47.5	13.6	2.3
Magnolia	9.3	0	2.2	5.9	0	2.4
Piceance-Parachute-Roan	74.3	0	1.8	57	0	2.0
West End General Habitat	0	0	0	97.8	5.9	1.7
Wolf Creek	2.3	28	1.6	4.7	37.4	1.6
Meeker	2.1	0	1.8	4.0	0	1.9

¹In Alternative D, big game severe winter range and summer range are proposed to be managed at 1.5 mi/mi² and general winter range and winter concentration areas are proposed to be managed at 2.5 mi/mi².

²Portions of general winter range and winter concentration areas overlap with defined areas which are proposed to be managed at 1.5 mi/mi².

³Potential overall route density in sage-grouse habitats if Alternative D were fully implemented for big game seasonal ranges and defined areas.

F.6. Distribution of Routes within the WRFO

Since the distribution of routes (or spatial arrangement of routes across a landscape) is important for both public access and impacts to wildlife (big game), the BLM has estimated how much BLM land within each GMU is within 470ft of a route (“impaired habitat”).

Habitat Impairment Calculation Methods –Current Conditions

- Area Included
 - The area included in the habitat impairment calculations is the same as what was used for the route density calculations (see Section F5).
- Routes Included
 - The routes included are the same as what was used for the route density calculations.
- Analysis Method
 - Routes in the travel route inventory were buffered on each side of the centerline by 470 ft to determine the area (square miles) that were impaired. Estimates were then put in context by reporting the percentage of available habitat (seasonal range) within a GMU that was impaired.

Habitat Impairment Calculation Methods – Potential Future Conditions (RMPA Only)

Calculating Impairment

- $\text{Route Density (mi/mi}^2\text{)} \times (5,280 \text{ feet /mile}) \times (470 \text{ feet} \times 2) = \text{square feet impaired habitat per square mile.}$
- $(\text{Square feet impaired per square mile}) / (43,560 \text{ square feet / acre}) = \text{acres impaired per square mile.}$
- $\text{Acres impaired per square mile} / 640 \text{ acres per square mile} = \text{proportion of impaired habitat per square mile of affected seasonal range.}$

For example:

- $1.5 \text{ mi/mi}^2 \text{ route density} \times 5,280 \text{ feet per mile} \times 940 \text{ feet of impaired buffer along road} = 7,444,800 \text{ square feet impaired per square mile.}$
- $7,444,800 \text{ square feet impaired per square mile} / 43,560 \text{ sq. ft /acre} = 170.9 \text{ acres impaired per sq. mi.}$
- $170.9 \text{ impaired acres per sq. mi.} / 640 \text{ acres per sq. mi.} = .267$
- $.267 \times 100 = 26.7\% \text{ average impairment at any scale.}$

Shortcut: $\text{Route Density (mi/mi}^2\text{)} \times 0.178 = \text{impairment at any scale}$

Because these impairment calculations are based strictly on miles of routes, no consideration was given for buffer overlap. This method is appropriate to compare alternatives from a planning perspective. For future TMP level analysis, GIS generated route location and distribution will be available to calculate actual route densities and impairment.

Table F14. Route Densities and Habitat Impairment by Seasonal Range and GMU – Current Conditions

Game Mgmt Unit	Summer Range			Severe Winter Range			General Winter Range and Winter Concentration Areas		
	Current Route Density ¹ (mi/mi ²)	Habitat Impaired ²		Current Route Density ¹ (mi/mi ²)	Habitat Impaired ²		Current Route Density ¹ (mi/mi ²)	Habitat Impaired ²	
		acres	%		acres	%		acres	%
10	1.4	19,157	21	3.1	19,033	40	2.1	47,560	31
11	2.3	1,883	34	2.3	13,736	34	1.7	23,385	25
21	1.9	28,869	28	2.4	49,224	34	2.0	74,265	30
22	2.8	13,110	42	2.5	76,471	38	2.1	71,480	34

¹The current route density is based on known route densities of all routes on BLM lands (i.e., based on the route inventory).

²The amount of habitat within 470 ft of a route is considered “impaired” big game habitat. This analysis was based on known spatial arrangement of routes (i.e., buffered routes in the route inventory in GIS to estimate acreages impacted).

Table F15. Route Densities and Habitat Impairment by Seasonal Range and GMU – Implementation of Route Density in Alt A

Game Mgmt Unit	Summer Range			Severe Winter Range			General Winter Range and Winter Concentration Areas		
	Alt A Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²		Alt A Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²		Alt A Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²	
		acres	%		acres	%		acres	%
10	1.5	24,453	27	1.5	12,986	27	3.0	80,977	53
11	1.5	1,502	27	1.5	10,981	27	3.0	48,960	53
21	1.5	27,171	27	1.5	38,714	27	3.0	131,759	53
22	1.5	11,921	27	1.5	54,358	27	3.0	112,082	53

¹The Alt A proposed route density reflects what the route density within these seasonal ranges could be if fully implemented in future travel management plans (accounting for any overlap with more restrictive defined areas).

²The amount of “impaired” big game habitat is an estimate of how many acres would be within 470 ft of a route if route density were fully implemented.

Table F16. Route Densities and Habitat Impairment by Seasonal Range and GMU – Implementation of Route Density in Alt C

Game Mgmt Unit	Summer Range			Severe Winter Range			General Winter Range and Winter Concentration Areas		
	Alt C Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²		Alt C Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²		Alt C Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²	
		acres	%		acres	%		acres	%
10	0.9	15,450	17	1.3	11,062	23	2.2	60,950	40
11	1.3	1,279	23	1.0	7,321	18	2.1	35,104	38
21	1.5	26,108	26	1.5	38,714	27	2.4	103,778	42
22	1.5	11,789	27	1.5	54,543	27	2.5	94,108	45

¹The Alt C proposed route density reflects what the route density within these seasonal ranges could be if fully implemented in future travel management plans (accounting for any overlap with more restrictive defined areas and sage-grouse habitat).

²The amount of “impaired” big game habitat is an estimate of how many acres would be within 470 ft of a route if route density were fully implemented.

Table F17. Route Densities and Habitat Impairment by Seasonal Range and GMU – Implementation of Route Density in Alt D

Game Mgmt Unit	General Winter Range and Winter Concentration Areas		
	Alt D Proposed Route Density ¹ (mi/mi ²)	Habitat Impaired ²	
		acres	%
10	2.5	68,832	45
11	2.5	41,472	45
21	2.5	111,744	45
22	2.5	95,040	45

¹The Alt D proposed route density reflects what the route density within these seasonal ranges could be if fully implemented in future travel management plans (accounting for any overlap with more restrictive defined areas).

²The amount of “impaired” big game habitat is an estimate of how many acres would be within 470 ft of a route if route density were fully implemented.

Table F18. Collective Big Game Seasonal Range Impairment in Four Major GMUs across Alternatives

Alternative	Summer Range		Severe Winter Range		General Winter Range and Winter Concentration Areas	
	Acres	% Range	Acres	% Range	Acres	% Range
Current Conditions ¹	68,033	28	158,464	37	216,690	31
A ¹	65,047	27	117,039	27	373,778	53
B	68,033	28	158,464	37	216,690	31
C	54,626	23	111,640	26	273,940	39
D	65,047	27	117,039	27	317,088	45

¹Alternative A (No Action Alternative) includes route density but has never been implemented. The table above shows the difference between current conditions and if BLM implemented Alternative A as described in the RMP.

F.7. Past, Present, and Reasonably Foreseeable Future Actions

Cumulative effects are defined in the CEQ regulations (40 CFR 1508.7) as “...the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”

Past and present conditions are summarized in the affected environment sections for each resource or resource use. In addition, a summary of past and present actions from the 1950s through 2009 can be found in the 2015 Oil and Gas Development Proposed RMPA/Final Environmental Impact Statement (section 4.11.2 on page 4-612).

Reasonably foreseeable future actions include continued development of minerals such as nacholite (sodium bicarbonate), coal, and fluid minerals (oil and gas) which would require construction of new temporary routes. In 2015, the BLM approved Natural Soda’s plant expansion which could require drilling an additional well pair each year as well as an additional monitoring or exploration hole each year (DOI-BLM-CON05-2015-0019-EA). In 2013, the BLM approved Blue Mountain Energy’s coal lease application which could require surface drilling of holes for exploration, gob degas, nitrogen injection, and mine ventilation shafts (DOI-BLM-CO-110-2012-0023-EA). Both Natural Soda and Blue Mountain Energy use existing routes as much as practical and new access routes are typically less than 1,000 ft in length.

The 2015 Oil and Gas Development Proposed RMPA/Final Environmental Impact Statement assumed that 1,100 new well pads would be constructed in the WRFO over the next 20 years. In order to estimate the distribution of the associated access routes, the 1,100 future pads were distributed between the GMUs based on the distribution of wells spudded in each GMU from 2010-July 2016 (Table F19). The assumed length of the access routes (0.5 mi/well pad) was based on the length of constructed access routes during the same time period.

Table F19. Future Oil and Gas Access Routes

GMU	Estimated Future Well Pads	Associated Access Routes (miles)
10	48	24
11	40	20
21	101	51
22	793	397
31	65	33
32	49	25
211	4	2

In addition to temporary routes associated with mineral development, the BLM would also continue to authorize additional routes for access to private property, rights-of-way (such as power line poles and cathodic protection stations), and range improvement projects (such as water developments and trap sites for wild horse gathers).

The BLM is currently evaluating a proposed land exchange (DOI-BLM-CO-N05-2017-009-EA) which could alter access to public land in GMUs 11 and 211.

Other reasonably foreseeable actions within the Planning Area include vegetation treatments (including prescribed fire), wildfires, and livestock grazing. Recreation use is characterized by dispersed camping, OHV use, and hunting.

APPENDIX G. OPEN AREA IMPLEMENTATION PLANS

G.1. LO7 Hill Open Area

To facilitate use of the LO7 Hill proposed open area, the BLM would install an entrance sign, a kiosk, pipe and cable perimeter fencing, other boundary markers, and gravel for the entrance road and parking area. Other work at this site would include using the Yampa Valley Trail Riders' trail dozer or similar machinery to improve the entrance road, grade the parking area, enlarge some of the mud bog holes, improve existing OHV riding routes, and remove trash and debris from the site. This first phase would provide a managed setting for open OHV riding. The second potential future phase for this site may include constructing an OHV skills course to improve safety of OHV riders, provide an OHV training site, and provide a controlled area to introduce new riders to OHV skills required to ride trails. The OH skills course may be developed when public need and demand for this type of use increase, partnerships are developed, or other funding and maintenance opportunities present themselves.

G.2. Rangely Rock Crawling Park

At the Rangely Rock Crawling Park, the BLM would replace the two existing kiosks, add a third kiosk near the competition slab, improve the existing parking areas with grading and gravel, add a third parking area on the east side, and add signage along the slabs to mark the open area boundaries. This work also includes using the trail dozer to maintain the travel routes between the rock slabs, which would reduce erosion but keep the routes technical and challenging. It is anticipated that there would be at least three areas along existing travel routes between the rock slabs that would need to be re-constructed (totaling approximately 500 feet) in order to avoid impacts to sensitive resources.

The BLM would also designate routes to the rock slabs within the Rangely Rock Crawling Park (see Figure 17). Approximately 8.6 miles would be designated as either open primitive roads or trails. Trails provide direct access to the rock slabs and vehicles using these routes would need to have a Colorado OHV registration sticker. Approximately 2.0 miles would be available for administrative use only and 8.3 miles would be closed to eliminate redundant routes and minimize impacts to other resources. There are two route segments (combined total of 0.1 mile) that lead out of the park to the south and route designation decisions on these segments would be deferred until subsequent travel management planning. All designated routes within the Rangely Rock Crawling Park have been assigned a Maintenance Intensity of Level 1, which means the route may be impassable of extended periods of time. This level meets the current capacity of the BLM staffing and budgets. This also provides the public a realistic expectation of how these routes are planned to be maintained by the BLM and that if conditions change on these routes, they may be impassable for extended periods of time.

G.3. North Rangely Open Area

The BLM would install an entrance sign, a kiosk, boundary markers and fencing, and would gravel a short entrance road and small parking area. A small OHV skills course may be developed as public need and demand for this type of use increase, partnerships are developed, or other funding and maintenance opportunities present themselves.

G.4. North Dinosaur Open Area

The BLM would install an entrance sign, a kiosk, boundary markers and fencing, and a graveled parking area.

G.5. Open Area Sign Plan; Education, Monitoring, and Enforcement Plan; and Maintenance Plan

G.5.1. Sign Plan

All BLM signage would conform to specifications found in the BLM National Sign Guidebook. There would be one entrance sign at LO7 Hill, North Rangely, North Dinosaur, and two entrances at the Rangely Rock Crawling Park. These signs would be approximately 2-3 ft high and 5-7 ft wide installed on two vertical posts (Figure 31). Area boundary signage and route signage would consist on Carsonite-style fiberglass markers (Figure 32) or 18in x 24in signs on one u-channel post (Figure 33).

Route signage would be implemented in the Rangely Rock Crawling Park at intersections shown in Figure 17. Open area boundary delineation may also be accomplished by installing fencing in certain areas in addition to the signage. Each open area parking area would have an informational kiosk. The kiosks will consist of 1 or 2 panels 3ft x 4ft with 2-4 posts of 4in x 6in lumber installed 3 feet into the ground (Figures 34 and 35). The final height of each kiosk would be approximately 6ft 4in. The parking areas are all relatively flat, existing areas where the public parking of motor vehicles and trailers has occurred or is occurring. These parking areas may be graded to improve drainage and surfaced with gravel to improve durability. Barriers may be installed around the parking areas to delineate the parking areas from the OHV riding areas.

Figure 31-Open Area Entrance Sign Example

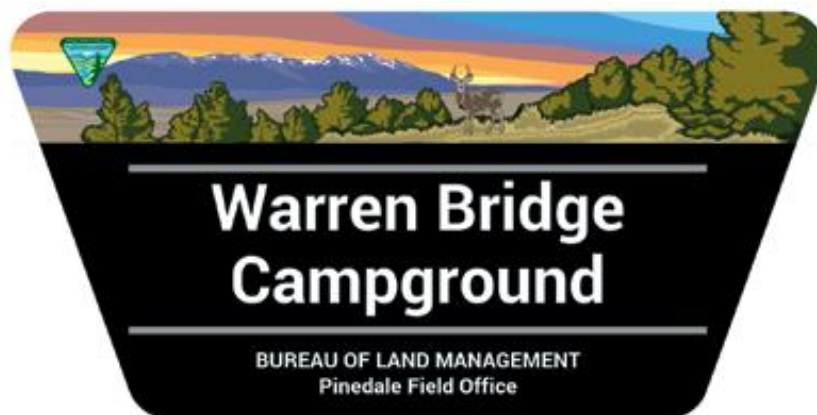


Figure 32-Carsonite-style Signage Example



Figure 33-U-channel Style Signage



Figure 34-Singel Panel Kiosk Plans

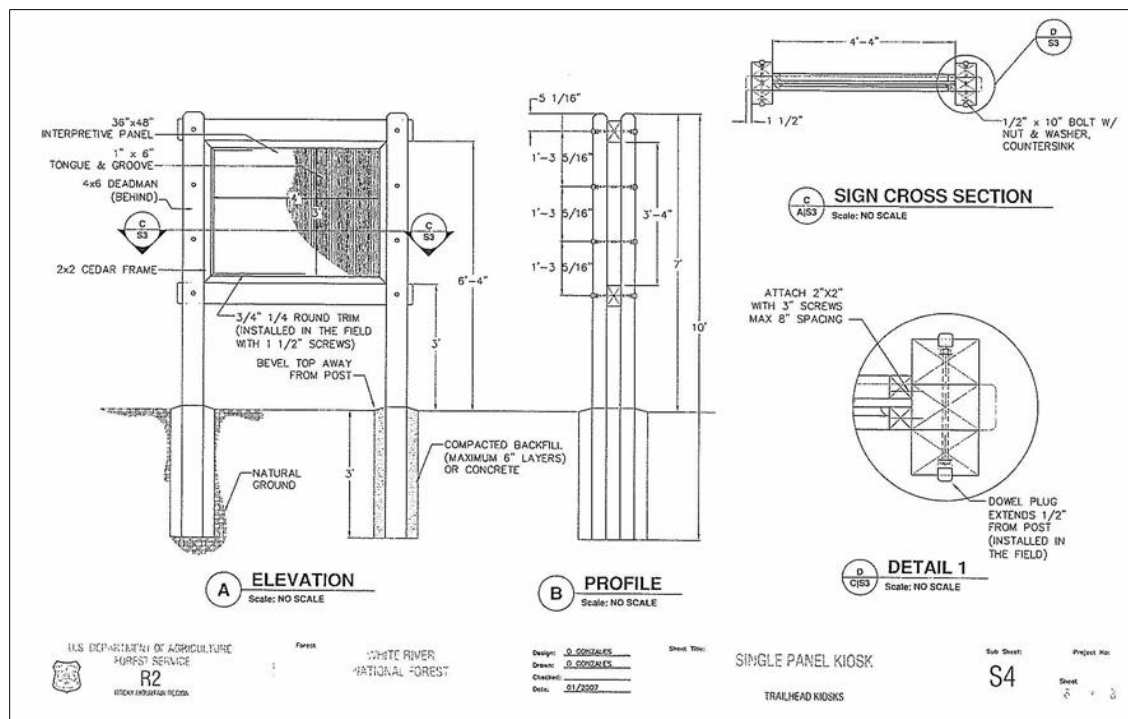
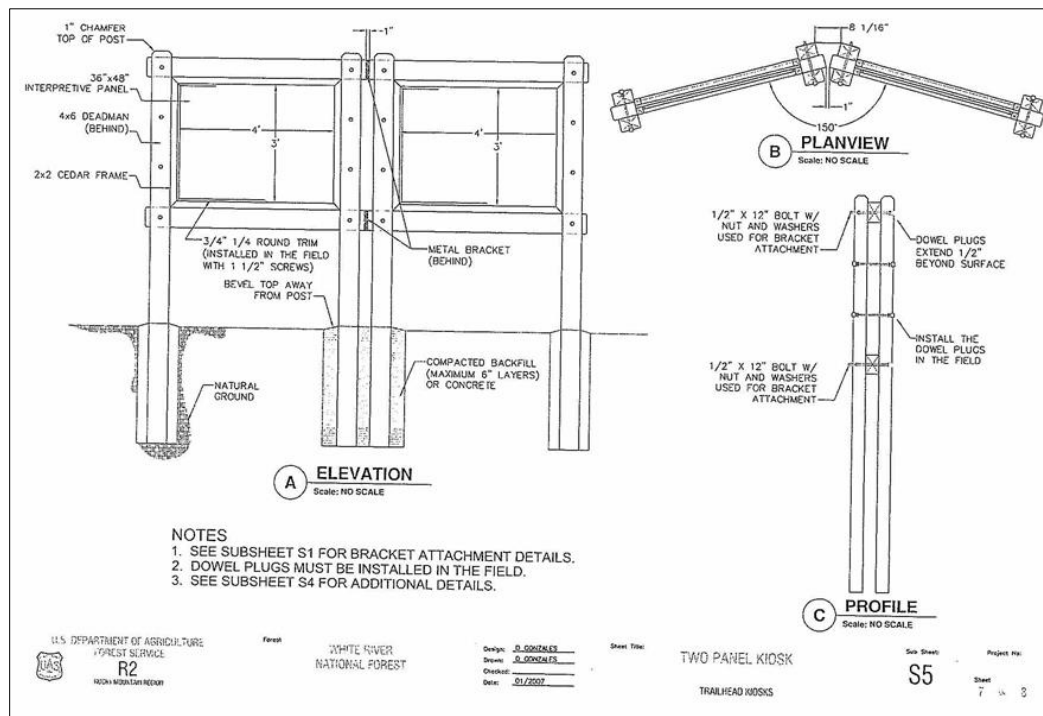


Figure 35-Double Panel Kiosk Plans



G.5.2. Education, Monitoring, and Enforcement Plan

There would be new maps and educational information installed in all existing kiosks on BLM lands within the field office would include open, limited, and closed areas, a point of reference map, and BLM regulations. Also, brochures and maps would be created and would include this same type of information, and would be available at the BLM office in Meeker and at public information centers in all nearby communities.

Educating the public on the location and boundaries of the various areas (winter off-route travel, seasonal closures, and closed areas) may be accomplished by distributing maps and information rather than extensive signing efforts. Signs would be installed at areas where boundaries are not be adhered to or in areas where distributing maps and information is not achieving the desired management of the area.

The BLM transportation network would be monitored by BLM staff each year. Not all routes and areas included in the network may be visited each year. It is likely that BLM staff would need to monitor routes and areas that receive higher use than areas with less use, as well as any routes or areas with public complaints. BLM traffic counters would continue to be used to monitor the amount of use of the transportation system. These traffic counters may be rotated to new locations every 2-4 years to learn more about the use of the transportation system.

G.5.3. Maintenance Plan

The only travel route designations made as part of this planning effort were in the Rangely Rock Crawling Park. Each route that is designated is assigned a Maintenance Intensity. The BLM assigns Maintenance Intensities to provide guidance for appropriate “standards of care” to the BLM designated routes. Maintenance Intensities provide operational guidance to field personnel on the appropriate intensity, frequency, and type of maintenance activities that should be undertaken to keep the route in acceptable condition and provide guidance for the minimum standards of care for the annual maintenance of a route.

All travel routes designated in the Rangely Rock Crawling Park have been assigned a Maintenance Intensity of Level 1, which means the route may be impassable of extended periods of time. This level meets the current capacity of the BLM staffing and budgets. This also provides the public and RBC a realistic expectation of how these routes are planned to be maintained by the BLM and that if conditions change on these routes, they may be impassable for extended periods of time. The travel routes that are approaches or exits to and from the rock crawling open areas were designated as trails open for full-sized motor vehicles. This intended to serve the modified motor vehicles and OHVs that are able to travel across the rock crawling open areas and these routes would not be maintained to meet passenger car capabilities.

Opportunities to expand the existing maintenance capacity and capabilities of BLM would be pursued. Partnerships may be developed with OHV clubs, volunteers, or other groups or agencies.